Getac

E110

USER'S MANUAL

Rugged Mobile Computing Solutions

Sep. 2012

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For the latest version of the manual, please visit the Getac website at www.getac.com.

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Chapter 1

Getting Started

Congratulations on purchasing this rugged Tablet PC.

This chapter first tells you step by step how to get the Tablet PC up and running. Then, you will find a section briefly introducing the external components of the Tablet PC.

Getting the Tablet PC Running

Unpacking

After unpacking the shipping carton, you should find these standard items:

- Tablet PC
- Accessories:
  – AC adapter
  – AC power cord
  – Hand strap
  – Screen protector film (already attached to the screen)
  – Stylus and tether

Inspect all the items. If any item is damaged or missing, notify your dealer immediately.

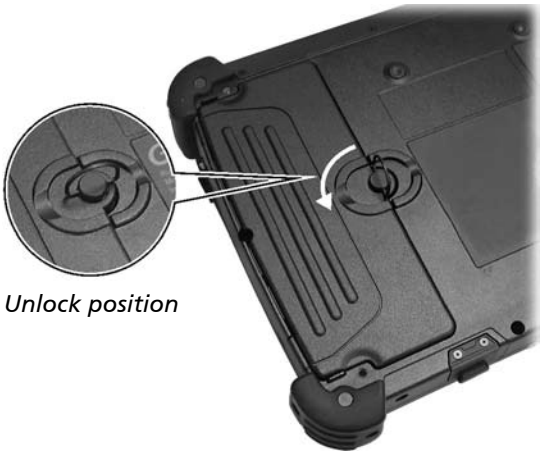
Keep the shipping carton and packing materials in case you need to ship or store the Tablet PC in the future.

Installing the Battery Pack and Connecting to AC Power

The Tablet PC operates either on the external AC power or internal battery power. It is suggested that you use AC power when starting up the Tablet PC for the very first time.

CAUTION: Use only the AC adapter included with your Tablet PC. Using other AC adapters may damage the Tablet PC.

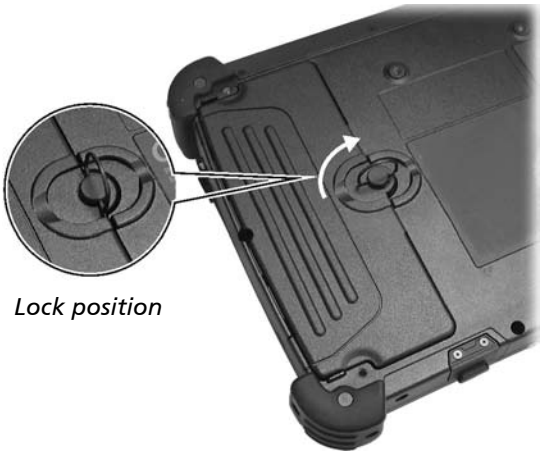
1. Make sure that the Tablet PC is turned off.
2. Place the Tablet PC upside down.
3. Lift the latch handle of the battery cover and turn it counterclockwise to the unlock position. Then, detach the cover from the Tablet PC.



Unlock position

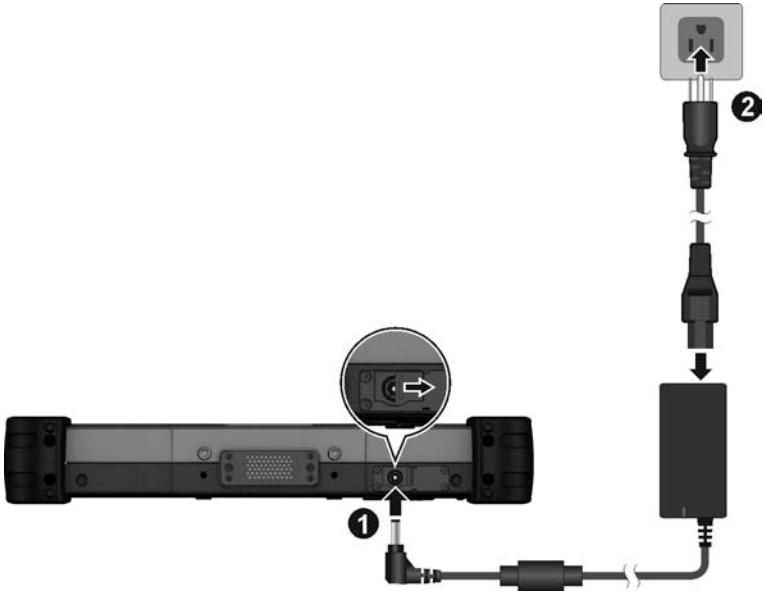
4. Fit the battery pack into place (❶). Tightening the two screws (❷) is optional. The lack of the screws will not affect the rugged and waterproof feature of the Tablet PC.

5. Replace the battery cover and turn the latch clockwise to the lock position.



Lock position

6. Plug the DC cord of the AC adapter to the power connector of the Tablet PC (❶). Plug the female end of the AC power cord to the AC adapter and the male end to an electrical outlet (❷).



7. Power is being supplied from the electrical outlet to the AC adapter and onto your Tablet PC. Now, you are ready to turn on the Tablet PC.

CAUTION:

- When you disconnect the AC adapter, disconnect from the electrical outlet first and then from the Tablet PC. A reverse procedure may damage the AC adapter or the Tablet PC.
- When unplugging the connector, always hold the plug head. Never pull on the cord.

NOTE: When the AC adapter is connected, it also charges the battery pack. For information on using battery power, see Chapter 3.

Using the Tether

A tether is provided for attaching the stylus to your Tablet PC.

1. Insert one of the tether's loop ends through the hole of the stylus (as indicated by ❶ below). Then, insert the other end through the first loop (as indicated by ❷ below) and pull it tight.

2. Insert the other loop end to the tether hole on the Tablet PC (as indicated by ❶ below). Then, insert the stylus end through the loop (as indicated by ❷ below) and pull it tight.

Using the Hand Strap

Following the orientation as shown below, enclose your Tablet PC with the hand strap and engage all the hook-and-loop fasteners.

The hand strap allows you to firmly hold the Tablet PC by inserting your hand through the elastic band at the back.

The hand strap is designed with individual fasteners for easy access to different components (such as the battery). It also provides loops for adding a shoulder strap (purchased separately).

Turning On and Off the Tablet PC

Turning On

Press the power button (⏻). The operating system such as Microsoft Windows should start.

Turning Off

When you finish a working session, you can stop the system by turning off the power or leaving it in Sleep or Hibernation mode:

To...	Do this...
Power off (Shutdown)	Use the Windows Start menu in the lower left and follow the shutdown procedure.
Sleep	Press the power button (default function) or use the Windows Start menu to put the Tablet PC in Sleep mode.
Hibernate	If you have specified "Hibernate" for the power button function in Windows Control Panel, you can press the power button to put the Tablet PC in Hibernation mode.

Press the power button to resume or turn on the system from any of these modes.

Taking a Look at the Tablet PC

NOTE: Depending on the model you purchased, the appearance of your Tablet PC may not be exactly the same as those shown in this manual.

CAUTION: When not using a connector, make sure that the connector cover is completely closed to ensure the waterproof integrity of the Tablet PC.

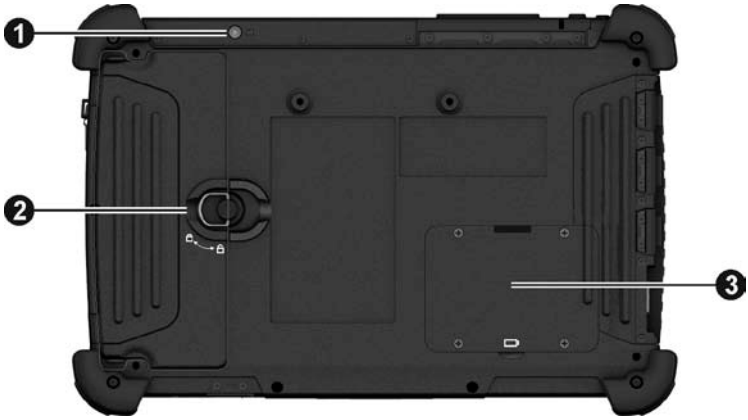
Front Components

Ref	Component	Description	See Also
❶	**Touchscreen**	Displays and receives information for the Tablet PC.	P. 2-2
❷	**Microphone**	Receives sound and voice to record voice.	
❸	**Light Sensor**	Senses the ambient light for automatic adjustments of the display backlight. The features can be enabled through OSD Control Panel and G-Manager.	P. 6-2 P. 6-14

Ref	Component	Description	See Also
		NOTE: Do not cover the sensor when in use.	
❹	**Power Button**	Turns on or off the system. (The default "off" state is "Sleep mode.")	P. 1-8
❺	**Menu Button**	Opens or closes the OSD Control Panel.	P. 6-2
		Provides a keyboard key function for specific occasions. (Information is provided in Appendix A.)	P. A-3
❻	**P1 Button**	Starts Microsoft Internet Explorer by default.	
		This button matches the first quick button in the OSD Control Panel. You can assign a different function to this button.	P. 6-6
		Provides a keyboard key function for specific occasions. (Information is provided in Appendix A.)	P. A-3
❼	**Indicators**		
	Power	Lights green when the power is on.	
		Blinks green when the system is in Sleep mode.	
	Battery Charge	Lights green when the battery is fully charged.	P. 3-3
		Lights amber when the battery is being charged.	
		Blinks red (once per second) when the battery's capacity is below 10%.	
		Blinks red rapidly (once per 0.5 second) when there is a thermal protection problem with the battery. Ask for repair service in case this happens.	

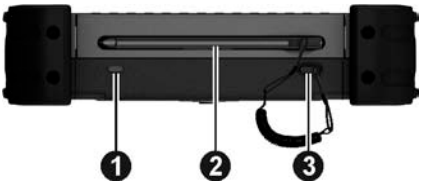
Ref	Component	Description	See Also
		Blinks amber when the battery charging is in an abnormal state. Replace the battery in case this happens.	
	RF (Radio Frequency)	Lights green (for models without WWAN) or amber (for models with WWAN) when RF radio is on.	P. 6-2
	Hard Disk Drive	Lights green when hard disk drive is being accessed.	
❽	**Speaker**	Sends out sound and voice from your Tablet PC.	

Rear Components



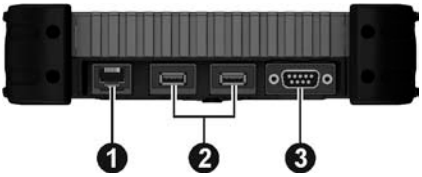
Ref	Component	Description	See Also
❶	**Camera Lens** (optional)	Allows you to use the camera function.	P. 6-20
❷	**Battery Pack**	Inside is the battery pack that supplies power to your Tablet PC when external power is not connected.	P. 3-3
		Contains the SIM card slot (optional).	P. 2-12
❸	**Backup Battery**	Provides temporary backup power when the main battery pack is removed.	P. 3-5

Right-Side Components



Ref	Component	Description	See Also
❶	**Kensington Lock**	Locks the Tablet PC to a stationary object for security.	P. 7-2
❷	**Stylus**	Serves as the input device by tapping on the touchscreen to make selections and enter information.	P. 2-2
❸	**Tether Hole**	Stylus tethered to this hole.	P. 1-6

Left-Side Components

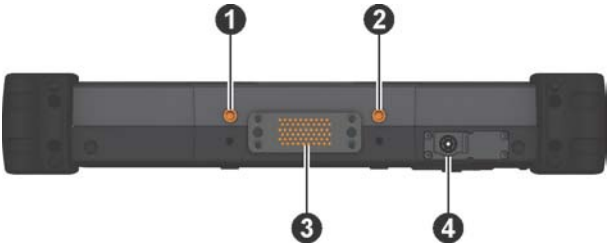


Ref	Component	Description	See Also
❶	**RJ-45 Connector**	Connects the LAN cable.	P. 2-7
❷	**USB Ports**	Each of the two ports connects a USB device, such as a USB flash disk, printer, digital camera, joystick, and more.	P. 4-5
❸	**Serial Port**	Connects a serial device.	P. 4-6

Top Components

Ref	Component	Description	See Also
❶	**Smart Card Reader**	Accepts a Smart Card for additional security feature.	P. 4-2
❷	**PC Card Slot**	Accepts a PC card for additional functions.	P. 4-3
	Or can be one of the below optional components (not shown in the figure).		
	Smart Card Reader (optional)	Accepts a Smart Card for additional security feature.	P. 4-2
	RFID/SD Module (optional)	Reads and writes RFID (Radio-frequency identification) tags with the internal antenna located above the screen at the center-right.	P. 6-33
		Accepts a Secure Digital (SD) card for removable storage media.	P. 4-4
❸	**Combo Audio Connector**	Connects a set of headphones or external speakers with amplifier	P. 4-7
		Supports a headset microphone with 4-pole TRRS 3.5mm jack.	
❹	**WWAN Antenna** (optional)	Should be pulled out for reception of mobile telecommunications signals.	P. 2-14

Bottom Components



Ref	Component	Description	See Also
❶	**WWAN Pass-through Connector** (optional)	Connects to the external antenna for WWAN (wireless wide area network) connectivity. **NOTE:** Must be connected via a docking station.	
❷	**GPS Pass-through Connector** (optional)	Connects to the external antenna for GPS signal reception. **NOTE:** Must be connected via a docking station.	
❸	**Docking Connector**	Connects to the Docking Station (available as an option).	P. 4-8
❹	**Power Connector**	Connects the AC adapter.	P. 1-5

Chapter 2

Operating Your Tablet PC

This chapter provides information about the use of the Tablet PC.

If you are new to Tablet PCs, reading this chapter will help you learn the operating basics. If you are already a computer user, you may choose to read only the parts containing information unique to your Tablet PC.

CAUTION:

- Do not expose your skin to the Tablet PC when operating it in a very hot or cold environment.
- The Tablet PC can get uncomfortably warm when you use it in high temperatures. As a safety precaution in such a circumstance, do not place the Tablet PC on your lap or touch it with your bare hands for extended periods of time. Prolonged body contact can cause discomfort and potentially a burn.

Using the Touchscreen

CAUTION: Do not use a sharp object such as a ballpoint pen or pencil on the touchscreen. Doing so may damage the touchscreen surface. Use the included stylus or your finger

NOTE:

- A screen protector film has been attached to the screen before shipment. The film is a consumable, which will be worn out by possible scratches. You can purchase a new one when replacement is required.
- Instead of a hard tip, your stylus has a soft tip so that it does not scratch the screen protector film. It is normal for the soft tip to wear out after a long period of use. You can purchase a new one when needed.

The screen of your Tablet PC is touch-sensitive. You can control the location of the cursor/pointer on the screen using the included stylus or your finger to communicate with the Tablet PC.

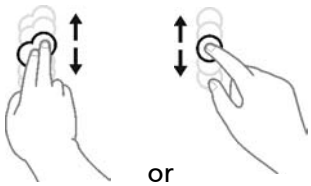
The following table shows how you use the touchscreen to obtain equivalent mouse functions.

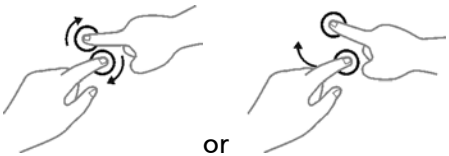
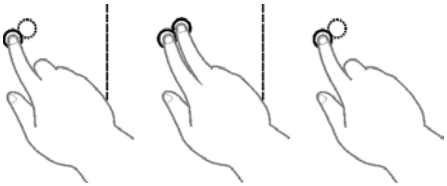
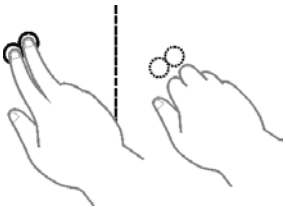
Term/Action	Equivalent Mouse Function
Tap: Touch the screen once.	Click/Point
Double-tap: Touch the screen twice rapidly.	Double-click
Tap and hold: Tap and hold until a popup menu appears.	Right-click
Drag: Hold the stylus (or finger) on the screen and drag across the screen until reaching your destination.	Drag

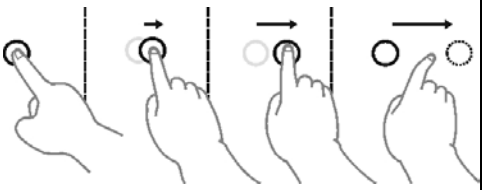
Using Multi-touch Gestures

If your model comes with multi-touch-capable screen and Windows 7, you can interact with your Tablet PC by placing two fingers on the screen. The movement of the fingers across the screen creates "gestures," which send commands to the computer.

Here are the multi-touch gestures that you can use:

Gestures	Actions (◯ = finger down; ◌ = finger up)	Descriptions
Pan (Scroll)	 or Drag 1 or 2 fingers up or down.	Use panning to see another part of a page that has scroll bars.
Zoom (Pinch)	Move two fingers apart/toward each other.	Use zooming to make an item (a photo for example) on the screen larger or smaller. The gesture works in applications that support mouse wheel zooming.

Gestures	Actions (○ = finger down; ◌ = finger up)	Descriptions
Rotate	 or Move two fingers in opposing directions. -or- Use one finger to pivot around another.	Use rotating to move a picture or other item on the screen in a circular direction (clockwise or counter-clockwise). The gesture works in applications that support the specific gesture.
Press and Tap	 Press on target and tap using a second finger.	Use press and tap to access the shortcut menu.
Two-finger Tap	 Tap two fingers at the same time (where the target is in the midpoint between the fingers).	The function is defined by applications that support the specific gesture.

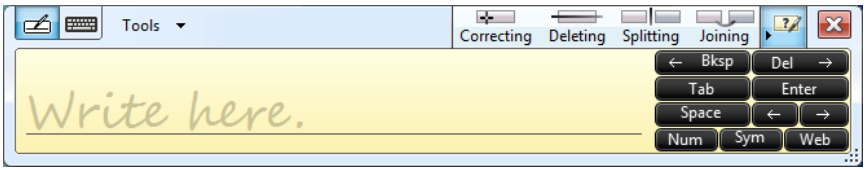
Gestures	Actions (○ = finger down; ◌ = finger up)	Descriptions
Flicks	 Make quick drag gestures in the desired direction.	Flick left or right to navigate back and forward in a browser and other applications. The gesture works in most applications that support back and forward.

Using the Input Panel

Use the Input Panel to enter text and perform various keyboard functions. There are two types of Input Panels for you to use in Windows 7:

- **Touch Keyboard** allows you to enter text by tapping the keys with your stylus, like pressing the keys on a standard keyboard.

- **Writing Pad** allows you to write on the writing pad, like writing on a piece of paper. Your handwriting will be converted into typed text.



To open the Input Panel, tap the Input Panel tab, which appears by default on the left edge of the screen. To switch between the two types, tap or at the upper left corner of the Input Panel.

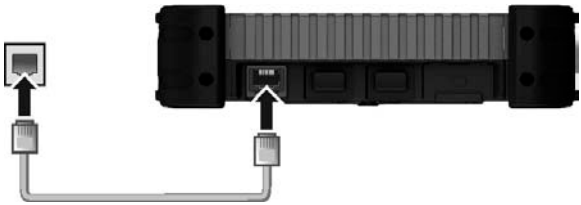
NOTE: For more information on using the Input Panel, see Windows' online help.

Using the Network Features

Using the LAN

The internal 10/100/1000Base-T LAN (Local Area Network) module allows you to connect your Tablet PC to a network. It supports data transfer rate up to 1000 Mbps.

To connect the network cable to the LAN module, connect one end of the LAN cable to the RJ-45 connector ( ) on the Tablet PC and the other end to the network hub.



Using the Wireless LAN (Optional)

The WLAN features include:

- Peer-to-Peer (Ad-Hoc) and Access Point (Infrastructure) modes support
- WEP (Wired Equivalent Privacy) 64/128-bit data encryption
- IEEE 802.11a/b/g/n standard compliance

Technology	802.11a	802.11b/g	802.11n
Channel Center in GHz	5.18 ~ 5.825 GHz	2.412 ~ 2.472 GHz	2.412 ~ 2.472 GHz 5.18 ~ 5.825 GHz
Channel	36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 149, 153, 157, 161, 165	1 ~ 13	2.4 GHz: 1 ~ 13 5.2 GHz: 36 ~ 165

Technology	802.11a	802.11b/g	802.11n
Data Rates (Mbps)	6, 9, 12, 18, 24, 36, 48, and 54 Mbps in OFDM mode	802.11b: 1 and 2 Mbps in DSSS mode; 5.5 and 11 Mbps in CCK mode	130 Mbps under the condition of 2 spatial streams, 64-QAM modulation type, 20 MHz-wide channel, and 5/6 coding rate.
		802.11g: 6, 9, 12, 18, 24, 36, 48, and 54 Mbps in OFDM mode	

Turning On/Off the WLAN Radio

NOTE: The FAA (Federal Aviation Agency) has deemed it unsafe to operate wireless devices in aircraft as this may interfere with flight safety. Remember to turn off wireless LAN when using your Tablet PC in the airplane.

1. Press the **Menu** button on your Tablet PC to open the OSD Control Panel.
2. Click the **RF** button to switch the wireless radio on/off. The word **ON** or **OFF** on the button indicates the current status.

3. Windows Mobility Center has wireless network turned on by default. The Wireless Network icon on the taskbar should appear without a red **X**. (In case you have previously turned it off in Windows Mobility Center, be sure to turn it on when using the function the next time.)

Connecting to a Wireless Network

1. Make sure that the WLAN function is enabled (as described above).
2. Click the Wireless Network icon on the taskbar. (An orange light in the icon indicates connections are available.)
3. In the list of available wireless networks, select a network, and then click **Connect**.

4. Some networks require a network security key or passphrase. To connect to one of those networks, ask your network administrator or Internet service provider (ISP) for the security key or passphrase.

For more information on setting a wireless network connection, refer to Windows online help.

NOTE: You can use Intel® PROSet Wireless to take full advantage of the WiFi capabilities of your Tablet PC. See the Help of the utility for instructions.

Using the BT Feature (Optional)

The BT 4.0 technology allows short-range (about 50 meters) wireless communications between devices without requiring a cable connection. Data can be transmitted through walls, pockets and briefcases as long as two devices are within range.

The status of the BT connection is indicated by the BT icon located in the taskbar.

Status	Icon
Off	Blue with red logo
On	Blue with white logo
Connected	Blue with green logo

Turning On/Off the BT Radio

1. Press the **Menu** button on your Tablet PC to open the OSD Control Panel.
2. Click the **RF** button to switch the wireless radio on/off. The word **ON** or **OFF** on the button indicates the current status.

3. The BT function is enabled by default, as indicated by the BT icon on the Windows taskbar. (In case you have previously disabled the function in the BT setup utility, be sure to enable it when using the function the next time.)

Connecting to another BT Device

1. Make sure that the BT function is enabled (as described above).
2. Make sure that the target BT device is turned on, discoverable and within close range. (See the documentation that came with the BT device.)
3. Start the BT setup utility.
4. If BT device(s) are detected, the device name(s) will be shown.
5. Double-click the device you want to connect. The screen displays all the services available for the selected device. Select the service you want.
6. Depending on the type of BT device that you want to connect to, you will need to enter the pertinent information.

For detailed information on using the BT setup utility, see the online help.

Using the WWAN Feature (Optional)

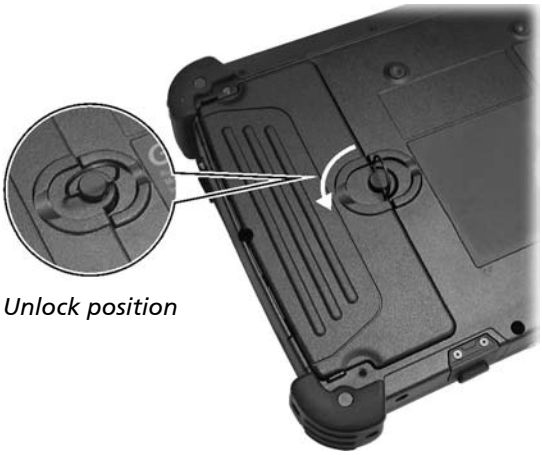
3G is the third generation of mobile phone standards and technology. Services include wide-area wireless voice telephony and broadband wireless data, all in a mobile environment.

NOTE: Your model only supports data transmission. Voice transmission is not supported.

Installing the SIM Card

To use the WWAN feature to connect to the Internet, you need to subscribe to WWAN service and acquire a SIM card from the service provider. To install the SIM card, follow these steps:

1. Make sure that the Tablet PC is not turned on or connected to AC power.
2. Lift the latch handle of the battery cover and turn it counterclockwise to the unlock position. Then, detach the cover from the Tablet PC.



Unlock position

3. Remove the two screws if existing (❶). Pull on the ribbon strip to lift the battery pack off the Tablet PC (❷).

4. Locate the SIM card slot and push the SIM card into the slot. Make sure the beveled corner on the SIM card is facing towards the Tablet PC and that the golden contact area on the card is facing downwards.

To remove the SIM card, just push in the SIM card to pop-out and remove the card.

5. Replace the battery pack.

6. Replace the battery cover and turn the latch clockwise to the lock position.

Connecting to WWAN Network

1. Press the **Menu** button on your Tablet PC to open the OSD Control Panel.
2. Click the **RF** button to switch the wireless radio on/off. The word **ON** or **OFF** on the button indicates the current status.

3. Pull out the WWAN antenna.

4. On Windows desktop, double-click the **AirCard Watcher** shortcut. The screen as below appears.

5. If the radio is currently off, click **Turn Radio On** to turn on the radio.
6. Use AirCard Watcher to manage your broadband wireless network connections such as:
    - Connect to the Internet
    - Configure user options
    - Send and receive SMS messages
    - Manage profiles
    - Use GPS to track your position (for models having the GPS module)

NOTE: For detailed information on using **AirCard Watcher,** see the program's online help.

Chapter 3

Managing Power

Your Tablet PC operates either on external AC power or on internal battery power.

This chapter tells you how you can effectively manage power. To maintain optimal battery performance, it is important that you use the battery in the proper way.

AC Adapter

CAUTION:

- The AC adapter is designed for use with your Tablet PC only. Connecting the AC adapter to another device can damage the adapter.
- The AC power cord supplied with your Tablet PC is for use in the country where you purchased your Tablet PC. If you plan to go overseas with the Tablet PC, consult your dealer for the appropriate power cord.
- When you disconnect the AC adapter, disconnect from the electrical outlet first and then from the Tablet PC. A reverse procedure may damage the AC adapter or Tablet PC.
- When unplugging the connector, always hold the plug head. Never pull on the cord.

The AC adapter serves as a converter from AC (Alternating Current) to DC (Direct Current) power because your Tablet PC runs on DC power, but an electrical outlet usually provides AC power. It also charges the battery pack when connected to AC power.

The adapter operates on any voltage in the range of 100~240 V AC.

Battery Pack

The battery pack is the internal power source for the Tablet PC. It is rechargeable using the AC adapter.

The operating time of a fully charged battery pack depends on how you are using the Tablet PC. When your applications often access peripherals, you will experience a shorter operating time.

NOTE: Care and maintenance information for the battery is provided in the "Battery Pack Guidelines" section in Chapter 7.

Charging the Battery Pack

NOTE:

- Charging will not start if the battery's temperature is above 50 °C (122 °F) or below –2 °C (28 °F); the charging process will stop if the battery's temperature gets above 60 °C (140 °F) or below –4 °C (25 °F). To avoid damaging the battery under this situation, disconnect the AC adapter and wait for the battery to return to room temperature before charging again.
- During charging, do not disconnect the AC adapter before the battery has been fully charged; otherwise you will get a prematurely charged battery.

To charge the battery pack, connect the AC adapter to the Tablet PC and an electrical outlet. The Battery Charge Indicator ( ) on the Tablet PC glows amber to indicate that charging is in progress. You are advised to keep the Tablet PC power off while the battery is being charged. When the battery is fully charged, the Battery Charge Indicator glows green.

It takes approximately 3 hours to fully charge the Li-Ion battery pack at a room temperature of 25 °C (77 °F) (may need a longer charging time at lower temperatures).

CAUTION: After the Tablet PC has been fully recharged, do not immediately disconnect and reconnect the AC adapter to charge it again. Doing so may damage the battery.

NOTE: The battery level may automatically lessen due to the self-discharge process (0.21% per day), even when the battery pack is fully charged (100%). This happens no matter if the battery pack is installed in the Tablet PC.

Checking the Battery Level

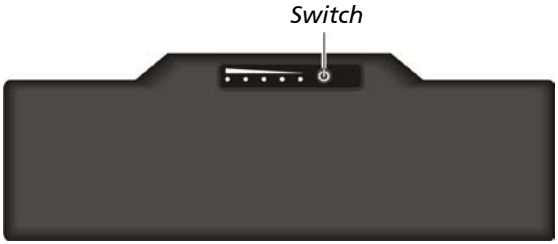
NOTE: Any battery level indication is an estimated result. The actual operating time can be different from the estimated time, depending on how you are using the Tablet PC.

By Operating System

You can check the approximate battery level using the battery meter function of the operating system. To read the battery level in Windows, click the battery icon on the taskbar.

By Gas Gauge

On the exterior side of the battery pack is a gas gauge for displaying the estimated battery charge. When the battery pack is not installed in the Tablet PC and you want to know the battery charge, you can press the switch with a pointed device to see the corresponding value of indicator segment that light green.



The value of the corresponding green segment indicates the relative percentage of the battery charge. The battery pack is fully discharged when you see no segment glowing green.

Backup Battery

Your Tablet PC comes with a backup battery to support hot swapping of the main battery pack. The backup battery can sustain power for up to 3 minutes, which should be long enough for you to replace the battery pack.

Whenever you remove the main battery pack, the system instantly switches to the backup battery. During this period, the system operation is not interrupted but the brightness level will be fixed at a low level and cannot be adjusted.

If you turn off the power before removing the main battery pack, the power remains off (not responding to the press of power button) during the replacement.

The backup battery will be charged when AC power is connected. Charging starts when the backup battery capacity is below 85%. If needed, you can also allow the main battery pack to charge the backup battery. (For setup information, see "Advanced Menu" in Chapter 5 and the **Charging Backup Battery** item.)

NOTE: The backup battery is not user-replaceable. It never functions as the power source as long as the main battery pack is installed.

Replacing the Battery Pack

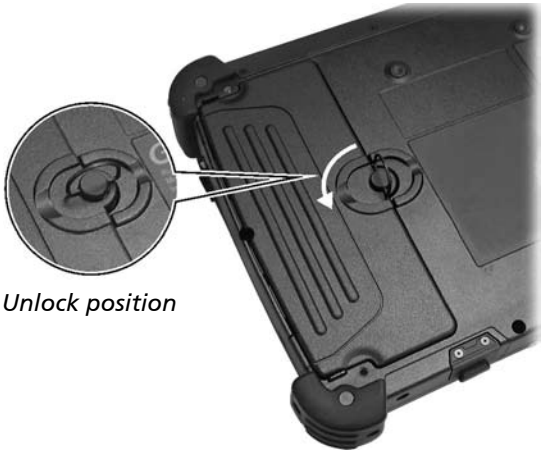
CAUTION:

- There is danger of explosion if the battery is incorrectly replaced. Replace the battery only with the Tablet PC manufacturer's battery packs. Discard used batteries according to the dealer's instructions.
- Do not attempt to disassemble the battery pack.

If you often rely on battery power for a long period of time while traveling, you may consider the purchase of an additional battery pack from your dealer and keep it with you in a fully charged state as a backup.

To replace the battery pack, follow these steps:

1. Lift the latch handle of the battery cover and turn it counterclockwise to the unlock position. Then, detach the cover from the Tablet PC.



Unlock position

2. Remove the two screws if existing (❶). Pull on the ribbon strip to lift the battery pack off the Tablet PC (❷).

3. Fit another battery pack into place.
4. Replace the battery cover and turn the latch clockwise to the lock position.

Battery Low Signals and Actions

When the battery is low, Windows gives warning messages and the Battery Charge Indicator ( ) blinks red to alert you.

NOTE: You can set up your threshold and signals of Battery Low under Windows.

Immediately save your data upon Battery Low. The remaining operating time depends on how you are using the Tablet PC.

Always respond to Battery Low by placing your Tablet PC on the Sleep or Hibernation mode, turning off the Tablet PC, or connecting the AC adapter. If you do not take any action, the Tablet PC will automatically hibernate and turn off.

Power Management

Your Tablet PC supports ACPI (Advanced Configuration and Power Interface) for power management. The power management feature allows you to reduce the power consumption for energy saving.

With an ACPI-compliant operating system such as Windows, power supply to different Tablet PC components is controlled on an as-needed basis. This allows maximum power conservation and performance at the same time.

In general, Windows' power management works in this way:

What...	When...
Power to the hard disk is turned off	When the hard disk has been idle for a set period.
Power to the display is turned off	When the display has been idle for a set period.
The Tablet PC enters the Sleep mode. The hard disk and display are turned off and the entire system consumes less power.	When the entire system has been idle for a set period.
	When you manually activate the mode.
The Tablet PC enters the Hibernation mode. (See the next subsection for more information.)	When the entire system has been idle for a set period.
	When you manually activate the mode.

For detailed information on power management, see Windows' Help.

Hibernation

Hibernation is a very useful feature. People frequently open many applications when they use computers. It takes some time to get all these applications open and running, and normally they all have to be closed before the computer can be turned off.

When you use the hibernation feature, you do not have to close the applications. The Tablet PC stores the state of your Tablet PC to a file on the hard disk and then shuts down. The next time you turn on your Tablet PC, you return to exactly where you left off.

Power-Saving Tips

Aside from enabling your Tablet PC's power saving mode (see previous section), you can do your part to maximize the battery's operating time by following these suggestions.

- Do not disable Power Management.
- Decrease the LCD brightness to the lowest comfortable level.
- Shorten the length of time before Windows turn off the display.
- Many USB devices use power just by being connected. If you use a USB mouse, you can save power by disconnecting the mouse and using the optional stylus. If you use a USB flash drive, unplug it when you are not using it.
- Remove the card (such as PC card and Smart Card) if not using it.
- Turn off the wireless radio if you are not using the wireless module (such as WLAN, BT, or WWAN).
- Turn off the Tablet PC when you are not using it.

Chapter 4

Expanding Your Tablet PC

You can expand the capabilities of your Tablet PC by connecting other peripheral devices. When using a device, be sure to read the instructions accompanying the device together with the relevant section in this chapter.

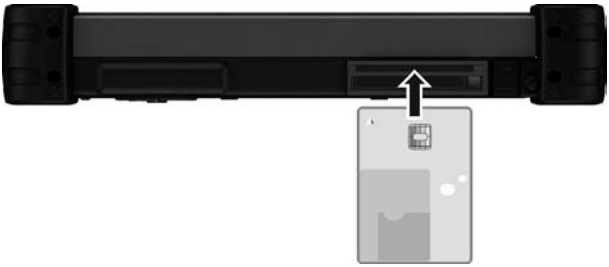
Using Smart Cards

Depending on your model, your Tablet PC has one or two smart card readers.

With an embedded microcontroller, smart cards have the unique ability to store large amounts of data, carry out their own on-card functions (e.g., encryption and mutual authentication), and interact intelligently with a smart card reader.

To insert a smart card:

1. Locate the smart card reader. Open the cover.
2. Slide the smart card, with its label and embedded computer chip facing up into the slot.



To remove a smart card:

1. Make sure that the software is not accessing the smart card.
2. Pull the card out of the slot.
3. Close the cover.

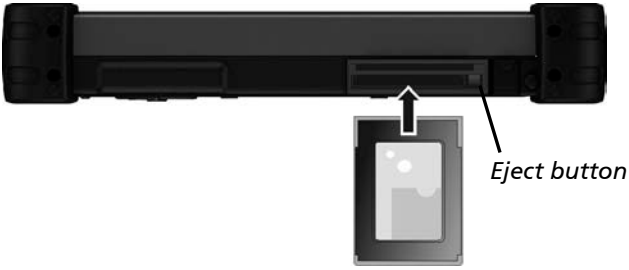
Using PC Cards

The PC card slot supports type II card and CardBus specifications.

NOTE: Avoid removing or inserting PC cards during Sleep mode.

To insert a PC card:

1. Locate the PC card slot. Open the cover.
2. Slide the PC card, with its label facing up, into the slot until the eject button pops out.



3. When a new card is seated, the Tablet PC will detect it and try to install the appropriate driver. Follow the on-screen instructions to complete the process.

To remove a PC card:

1. Double-click the **Safely Remove Hardware** icon found on the Windows taskbar and the **Safely Remove Hardware** window appears on screen.
2. Select (highlight) the PC card from the list to disable the card.
3. Push the eject button and the card will slide out slightly.
4. Pull the card out of the slot.
5. Close the cover.

Using SD Cards (Optional)

NOTE: You can use only storage cards. Your Card Reader does not support cards with I/O (input/output) functions such as a wireless network card.

Depending on your model, your Tablet PC may have an SD card reader. The card reader is a small drive for reading from and writing to removable storage cards (or called memory cards). The reader supports SD (Secure Digital) and SDHC (Secure Digital High Capacity) cards.

To insert an SD card:

1. Locate the SD card reader. Open the cover.
2. Align the card with its connector pointing to the slot and its label facing up. Slide the card into the slot until it reaches the end.

3. Windows will detect the card and assign it a drive name.

To remove a card:

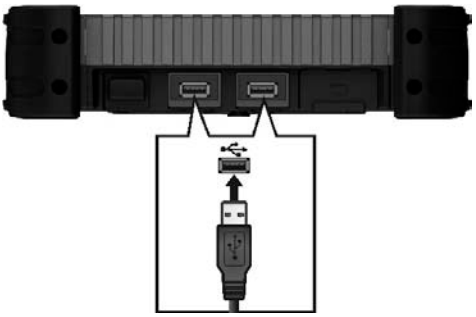
1. Double-click **My Computer**.
2. Right-click the drive with the card and select **Eject**.
3. Slightly push the card to release and then pull it out of the slot.
4. Close the cover.

Connecting a USB Device

Your Tablet PC has two USB ports for connecting USB devices, such as a digital camera, scanner, printer, modem, and mouse.

The USB ports support transfer rates up to 12 MB/s for USB 1.1 devices and 480 MB/s for USB 2.0 devices.

To connect a USB device, simply plug the device cable to one of the USB ports ( ). (Open the cover to access the port.)

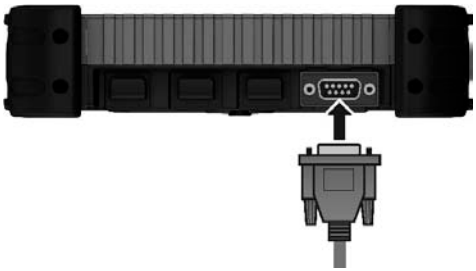


Connecting a Serial Device

Your Tablet PC has a serial port for connecting a serial device such as a serial mouse or serial communication device.

Follow this procedure to connect a serial device:

1. Make sure the Tablet PC is not turned on.
2. Plug the device cable to the serial port. (Open the cover to access the port.)



3. Turn on the Tablet PC.

Connecting an Audio Device

For higher audio quality, you can send sound through external audio devices such as speakers, headphones, or earphone set using the combo audio connector. (Open the cover to access the port.)

The combo connector is the “4-pole TRRS 3.5mm” type (Apple iPhone Recessed) so you can connect a compatible headset microphone.

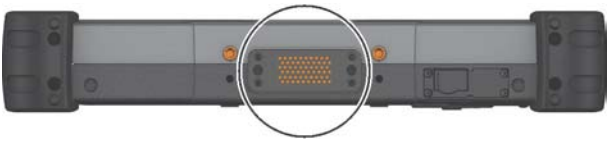
SAFETY WARNING:

To prevent possible hearing damage, do not listen at high volume levels for long periods.

Using the Docking Station

Docking Station is available as an option. The device eliminates the hassles of having you connect and disconnect the various cables when carrying your Tablet PC around and allows a variety of peripherals to be connected.

1. Locate the docking connector.



2. Connect the Docking Station to the docking connector.

For more detailed information, refer to the operating Instructions of the Docking Station.

NOTE: Hot/warm docking and hot/warm undocking are possible with the docking connector but it is recommended that prior to undocking, press the **Menu** button and the OSD Control Panel appears. Click the **Docking** button

.

Chapter 5

Using BIOS Setup and System Recovery

BIOS Setup Utility is a program for configuring the BIOS (Basic Input/ Output System) settings of the Tablet PC. BIOS is a layer of software, called firmware, that translates instructions from other layers of software into instructions that the Tablet PC hardware can understand. The BIOS settings are needed by your Tablet PC to identify the types of installed devices and establish special features.

System Recovery reinstalls Windows to your system and configures it to the system's factory default settings.

This chapter tells you how to use the BIOS Setup and System Recovery.

BIOS Setup

When and How to Use

You need to run BIOS Setup Utility when:

- You see an error message on the screen requesting you to run BIOS Setup Utility.
- You want to restore the factory default BIOS settings.
- You want to modify some specific settings according to the hardware.
- You want to modify some specific settings to optimize the system performance.

NOTE: The BIOS Setup Utility supports touchscreen operation. However, you are advised to connect a USB keyboard before running BIOS Setup. A keyboard provides complete and easy controls over the utility. The instructions in this chapter are based on keyboard operations.

To run BIOS Setup utility, press the **F2** key when the prompt ("**Press F2 for System Utilities**") appears at the bottom left corner of the screen during system startup. The prompt shows up on the screen for only a few seconds. You must press the **F2** key quickly. The BIOS Setup Utility main screen appears.

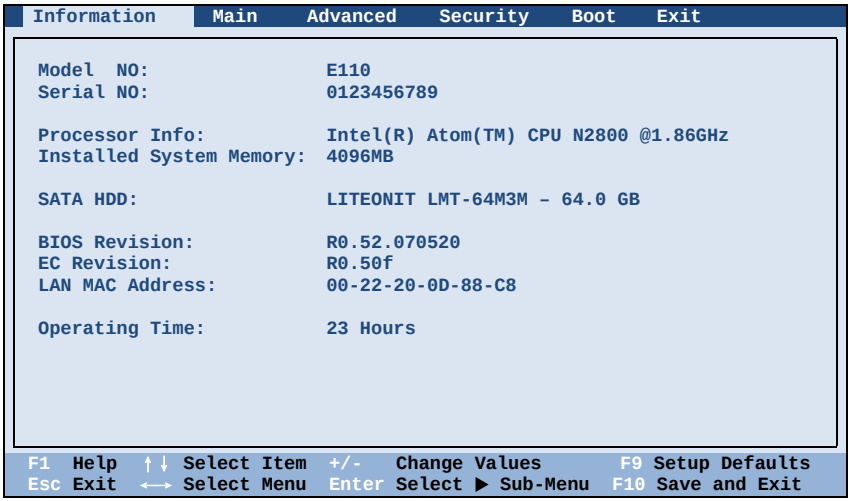
In general, you can use the arrow keys to move around and + / – keys to change the setup values. Keyboard information can be found at the bottom of the screen.

NOTE:

- The BIOS Setup Utility screens shown in this chapter are for your reference only. The actual items or settings on your Tablet PC may differ.
- The BIOS Setup Utility program may have been updated after the publication of this manual.
- The settings you select in your operating system might override similar settings in BIOS Setup Utility.

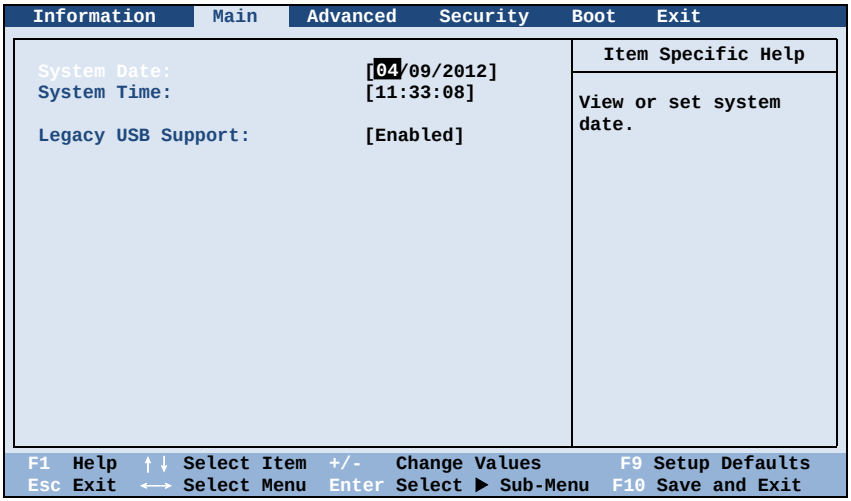
Information Menu

The Information menu contains the basic configuration information of the system. There are no user-definable items in this menu.


Information
Main
Advanced
Security
Boot
Exit
Model NO: E110
Serial NO: 0123456789
Processor Info: Intel(R) Atom(TM) CPU N2800 @1.86GHz
Installed System Memory: 4096MB
SATA HDD: LITEONIT LMT-64M3M - 64.0 GB
BIOS Revision: R0.52.070520
EC Revision: R0.50f
LAN MAC Address: 00-22-20-0D-88-C8
Operating Time: 23 Hours
F1 Help ↑↓ Select Item +/- Change Values F9 Setup Defaults
Esc Exit ←→ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Main Menu

The Main menu contains the various system settings.



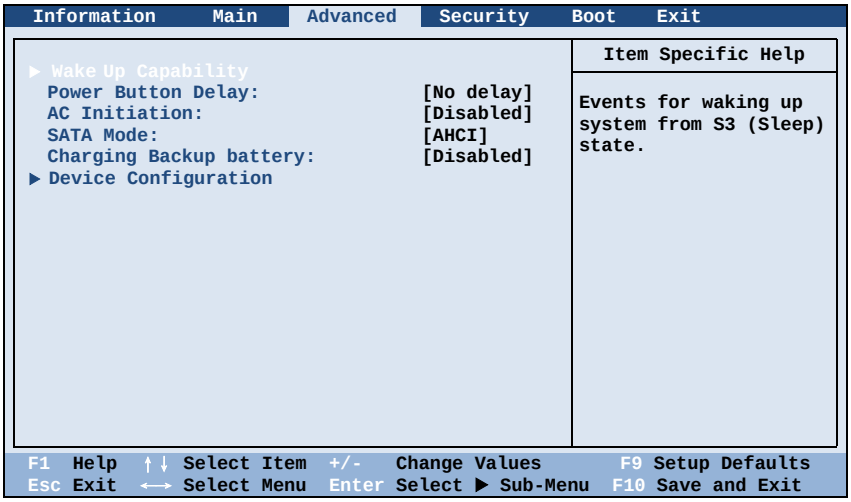
System Date sets the system date.

System Time sets the system time.

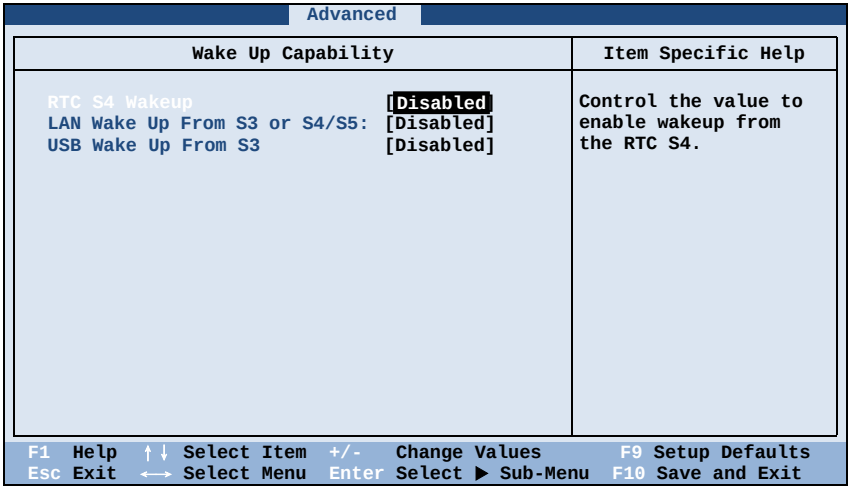
Legacy USB Support enables or disables the system's support for Legacy USB device in DOS mode.

Advanced Menu

The Advanced menu contains the advanced settings.


Information Main Advanced Security Boot Exit
▶ Wake Up Capability
Power Button Delay: [No delay]
AC Initiation: [Disabled]
SATA Mode: [AHCI]
Charging Backup battery: [Disabled]
▶ Device Configuration
Item Specific Help
Events for waking up system from S3 (Sleep) state.
F1 Help ↑↓ Select Item +/- Change Values F9 Setup Defaults
Esc Exit ←→ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Wake Up Capability specifies events for waking up the system from S3/S4/S5 state. Press **Enter** to access the submenu as shown below.


Advanced
Wake Up Capability
Item Specific Help
RTC S4 Wakeup [Disabled]
LAN Wake Up From S3 or S4/S5: [Disabled]
USB Wake Up From S3 [Disabled]
Control the value to enable wakeup from the RTC S4.
F1 Help ↑↓ Select Item +/- Change Values F9 Setup Defaults
Esc Exit ←→ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

RTC S4 Wakeup enables or disables the RTC (Real Time Clock) wakeup from S4 (Hibernation) feature when AC power is connected. Set this item to *Enabled* if you use Windows task scheduler to have the computer automatically perform tasks at specific times.

LAN Wake Up From S3 or S4/S5 allows a LAN activity to wake up the system from S3 (Sleep) or S4 (Hibernation)/S5 (shutdown) state.

USB Wake Up From S3 allow a USB device activity to wake up the system from S3 (Sleep) state.

Power Button Delay sets the amount of time (2, 4, 6, or 8 seconds) to press and hold the power button for it to function.

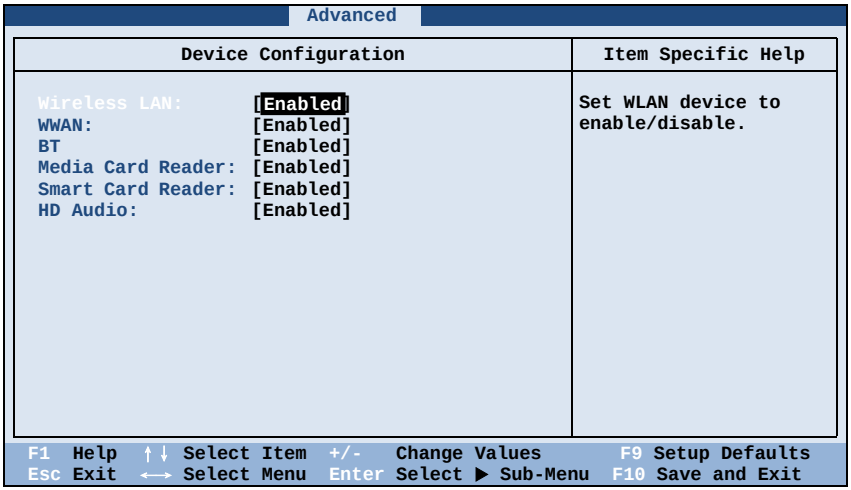
AC Initiation sets if connecting AC power will automatically start or resume your Tablet PC.

SATA Mode set to *AHCI* if your hard disk supports AHCI. AHCI allows you to take advantage of Advanced Host Controller Interface features. The options are *IDE* and *AHCI*.

CAUTION: Incorrect SATA mode settings can result in hard disk drive boot failure.

Charging Backup Battery allows the main battery to charge the backup battery. When set to *Enabled*, the backup battery can be charged by the main battery if the AC adapter is not connected. Charging starts when the backup battery has less than 70% capacity left and the main battery has more than 70% capacity left. Charging stops when the backup battery reaches 90% capacity or the main battery has less than 50% capacity left. When set to *Disabled*, the backup battery will be charged by the AC adapter only.

Device Configuration enables or disables several hardware components. Press **Enter** to access the submenu as shown below.


Advanced
Device Configuration
Item Specific Help
Wireless LAN: [Enabled]
WWAN: [Enabled]
BT [Enabled]
Media Card Reader: [Enabled]
Smart Card Reader: [Enabled]
HD Audio: [Enabled]
Set WLAN device to enable/disable.
F1 Help ↑↓ Select Item +/- Change Values F9 Setup Defaults
Esc Exit ←→ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

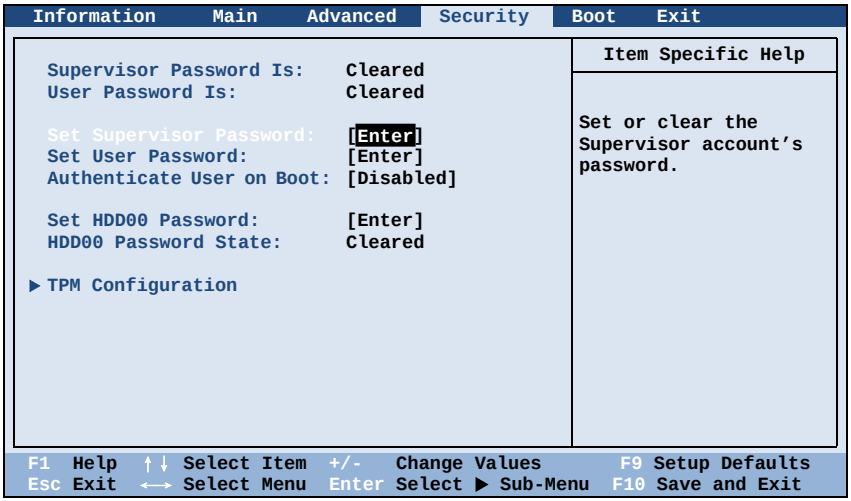
You can enable or disable the following items:

- **Wireless LAN**
- **WWAN**
- **BT**
- **Media Card Reader** (SD)
- **Smart Card Reader**
- **HD Audio** (High Definition Audio)

NOTE: The availability of the items depends on your model.

Security Menu

The Security menu contains the security settings, which safeguard your system against unauthorized use.


Information
Main
Advanced
Security
Boot
Exit
Supervisor Password Is: Cleared
User Password Is: Cleared
Set Supervisor Password: [Enter]
Set User Password: [Enter]
Authenticate User on Boot: [Disabled]
Set HDD00 Password: [Enter]
HDD00 Password State: Cleared
▶ TPM Configuration
Item Specific Help
Set or clear the Supervisor account's password.
F1 Help ↑↓ Select Item +/- Change Values F9 Setup Defaults
Esc Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

NOTE:

- You can set the user password only when the supervisor password has been set.
- If both the administrator and user passwords are set, you can enter any of them for starting up the system and/or entering BIOS Setup. However, the user password only allows you to view/change the settings of certain items.
- A password setting is applied right after it is confirmed. To cancel a password, leave the password empty by pressing the **Enter** key.

Supervisor/User Password Is shows whether you have set the supervisor/user password or not for the system.

Set Supervisor/User Password sets the supervisor/user password. When typing the password, first make sure that Num Lock is off, and then type the password in the entry fields and press **Enter**. Confirm your password by

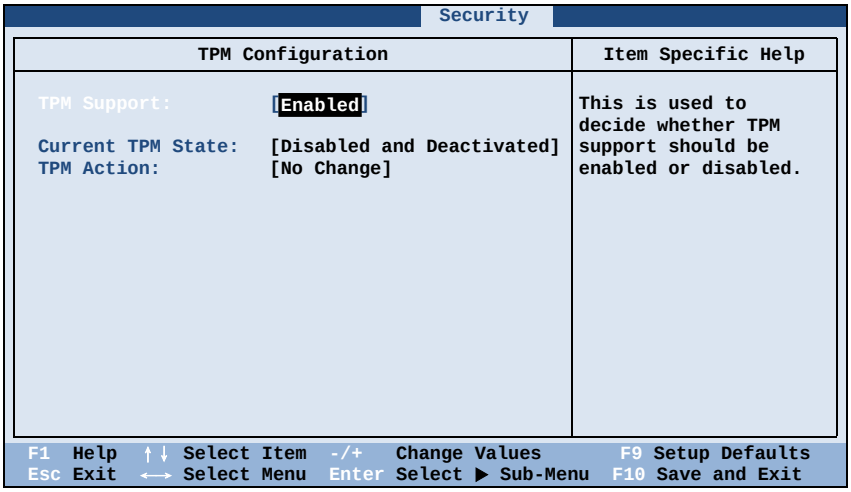
typing it again and pressing **Enter**. You can set the supervisor/user password to be required for starting up the system and/or entering BIOS Setup.

Authenticate User on Boot allows you to enable or disable the entering of password for booting up your system. Once the password is successfully set and this item is enabled, it is required for booting up the system.

Set HDD00 Password sets the password for locking the Primary Master hard disk drive. After setting a password, the hard disk drive can only be unlocked by the password no matter where it is installed.

HDD00 Password State shows whether you have set the hard disk password or not.

TPM Configuration sets various TPM parameters. Press **Enter** to access the submenu as shown below.


Security
TPM Configuration
Item Specific Help
TPM Support: [Enabled]
Current TPM State: [Disabled and Deactivated]
TPM Action: [No Change]
This is used to decide whether TPM support should be enabled or disabled.
F1 Help ↑↓ Select Item -/+ Change Values F9 Setup Defaults
Esc Exit ←→ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

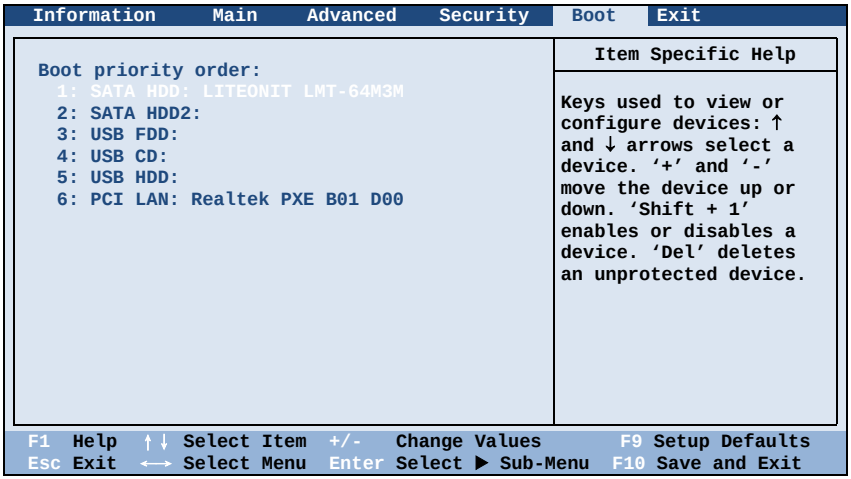
TPM Support enables or disables TPM (Trusted Platform Module) support. TPM (Trusted Platform Module) is a component on your computer's mainboard that is specifically designed to enhance platform security by providing a protected space for key operations and other security critical tasks.

Current TPM State shows the current TPM state.

TPM Action allows you to select between *No Change*, *Clear*, *Disabled and Deactivated*, and *Enabled and Activated*.

Boot Menu

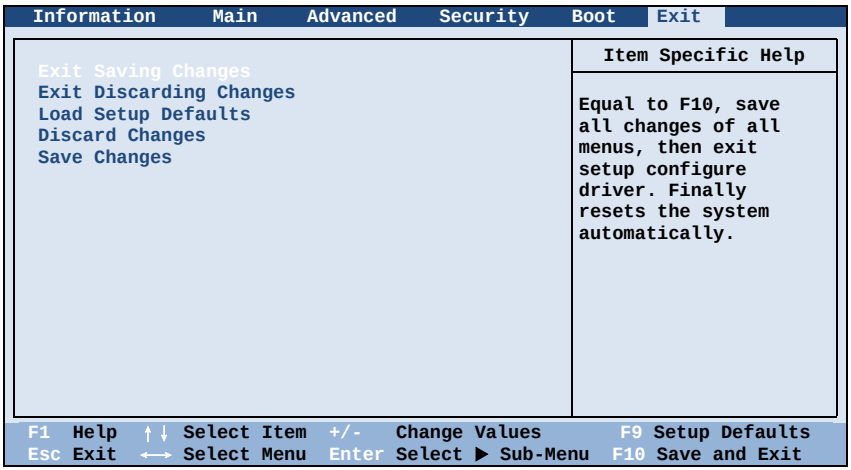
The Boot menu sets the sequence of the devices to be searched for the operating system.


Information
Main
Advanced
Security
Boot
Exit
Boot priority order:
1: SATA HDD: LITEONIT LMT-64M3M
2: SATA HDD2:
3: USB FDD:
4: USB CD:
5: USB HDD:
6: PCI LAN: Realtek PXE B01 D00
Item Specific Help
Keys used to view or configure devices: ↑ and ↓ arrows select a device. '+' and '-' move the device up or down. 'Shift + 1' enables or disables a device. 'Del' deletes an unprotected device.
F1 Help ↑↓ Select Item +/- Change Values F9 Setup Defaults
Esc Exit ←→ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

The bootable devices will be automatically detected during POST and shown here, allowing you to set the sequence that the BIOS uses to look for a device from which to load the OS. See the information on the right side of the menu for keyboard usage.

Exit Menu

The Exit menu displays ways of exiting BIOS Setup Utility. After finishing with your settings, you must save and exit so that the changes can take effect.


Information
Main
Advanced
Security
Boot
Exit
Exit Saving Changes
Exit Discarding Changes
Load Setup Defaults
Discard Changes
Save Changes
Item Specific Help
Equal to F10, save all changes of all menus, then exit setup configure driver. Finally resets the system automatically.
F1 Help ↑↓ Select Item +/- Change Values F9 Setup Defaults
Esc Exit ←→ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Exit Saving Changes saves the changes you have made and exits BIOS Setup Utility.

Exit Discarding Changes exits BIOS Setup Utility without saving the changes you have made.

Load Setup Defaults loads the factory default values for all the items.

Discard Changes restores the previous values for all the items.

Saves Changes saves the changes you have made.

Operations during POST

During POST when the Getac logo screen appears, you can double-tap the screen to access specific menus as described below.

Menu		Description
Boot Menu		Lists the bootable devices. Select the device you want to boot from.
App Menu	**Setup**	Runs the BIOS Setup Utility as described in the previous “BIOS Setup” section.
	HDI Recovery	Performs System Recovery as described in the next “System Recovery” section.

System Recovery

Use System Recovery when:

- The Windows operating system does not start at all.
- You want to restore the system to the factory state.

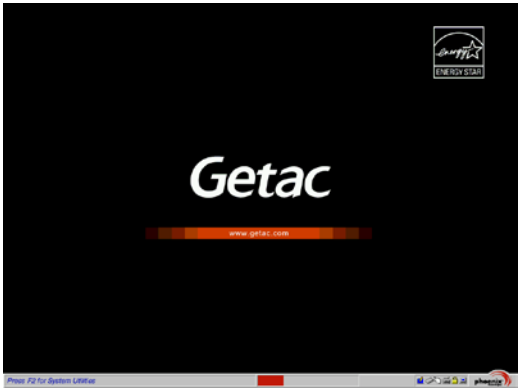
WARNING:

- Using this feature will reinstall Windows to your system and configure it to the system's factory default settings. All data on the hard disk drive will be lost.
- Make sure that power is not interrupted during the recovery process. An unsuccessful recovery may result in Windows startup problems.

To run System Recovery:

1. Connect the AC adapter.
2. Connect a USB mouse or keyboard.
3. Turn on the Tablet PC. During system startup when the Getac logo screen appears, double-tap the screen. In the menu that appears, select **App Menu** and then **HDI Recovery**.

   Or, if a keyboard is connected, you can press **Ctrl** + **Alt** + **F2** keys for four seconds instead of tapping the screen.



4. In the screen that appears, select **Recovery** to start the recovery process.

Hard Disk Image Recovery
This program will reset Windows operation system back to original factory state and all of the user data in hard disk will lost. Please make sure to backup your data and plug the AC adapter before starting.
Choose "Recovery" to start hard disk image recover, or "Cancel" to exit the program and restart system.
Disk Image Options:
Windows 7 32 Bit Pro
Recovery
Cancel
Getac
Version: 1.0.0.3, Build: Aug 4 2011, 14:02:41
(c) Getac. All rights reserved.

5. The progress bar shows the percentage completed. When it reaches 100%, the system turns off.
6. Turn on the Tablet PC. The Windows setup wizard starts. Follow the onscreen prompts to continue.
7. When the system restarts, the installer screen appears. The installer will perform system hardware detection and driver installation.

Getac Smart Installer
Welcome to use Getac product.
This is the first boot-up of Windows OS.
The Getac Smart Installer will automatically complete the setup of system.
Warning
Critical system configuration is being processed.
DO NOT interrupt until setup is completed...
Detection Process
Clean Up Process
Installation Process
Installing device drivers into OS.
Reboot
Getac

8. When completed, the system restarts and displays Windows desktop.

Chapter 6

Using Getac Software

Getac software includes application programs for specific computer components and utility programs for overall management.

This chapter describes how to use the programs.

Using the OSD Control Panel

The OSD (On Screen Display) Control Panel provides a user-friendly interface for you to quickly activate or operate certain functions on your Tablet PC with a simple tap of the screen.

To open the OSD Control Panel, press the **Menu** button on your Tablet PC.

The following screen appears.

The following table shows the various functions on the OSD Control Panel.

Icon	Function
	Opens the Help file explaining the OSD Control Panel.
	Opens the Quick Button Setup menu (refer to the next section for details).
	Closes the OSD Control Panel.
	Serves as the master ON/OFF control of the RF radio. The word on the button indicates the current status. When set to **OFF**, all wireless modules cannot be used. When set to **ON**, individual settings of the module work. The on/off status will persist through Sleep/Hibernation mode but it will always be on upon restarting.
	Switches the ECO mode to the next choice (**MAX**, **QUICK**, **WORK**, or **OFF**). The word on the button indicates the current status. (For information on ECO modes, see "ECO Tab" later in this chapter.) This button works only when using battery power. The ECO mode will return to the default **OFF** setting whenever AC power is connected, backlight status is changed, the system resumes from Sleep/Hibernation mode, or the system is restarted.
	The status would display **IN** when you connect your Tablet PC to the Docking Station. To turn off power to the Docking Station without disconnecting from your Tablet PC, click the **Docking** button. Before removing your Tablet PC from the Docking Station, make sure to click the **Docking** button to show **OUT**.
	Switches the LCD backlight to the next choice (**MAX**, **AUTO**, or **MANUAL**.) The word on the button indicates the current status.

Icon	Function
	When set to **MAX**, the backlight is adjusted to the highest brightness level. When set to **AUTO**, the brightness will be automatically adjusted according to the current ambient light. The backlight will return to the default **MANUAL** setting whenever the system resumes from Sleep/Hibernation mode or the system is restarted.
	Rotates the orientation from default landscape to **90°** portrait, **180°** landscape, or **270°** portrait. The status will persist through Sleep/Hibernation mode or system power off.
	Switches the display output to the next choice: **VGA** (external monitor), **BOTH** (LCD and external monitor), or **LCD**. This button works only when an external display is connected.
	Starts Microsoft Internet Explorer by default. You can assign a different function to this button (refer to the next section for details).
	Starts Windows Mobility Center by default. You can assign a different function to this button (refer to the next section for details).
	Starts the touchscreen calibration tool by default. You can assign a different function to this button (refer to the next section for details).
	Starts the BT Setup utility by default. You can assign a different function to this button (refer to the next section for details).
	Opens the Input Panel by default. You can assign a different function to this button (refer to the next section for details).

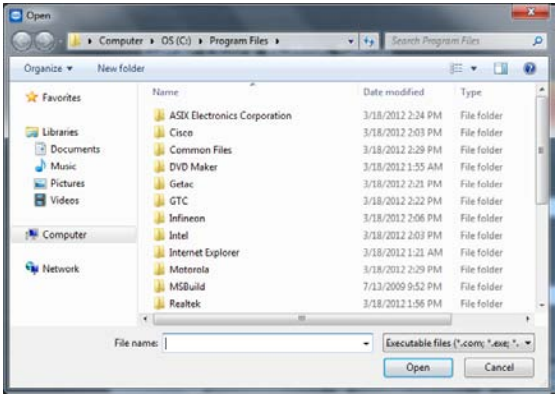
Icon	Function
	Allows you to adjust the sound volume by dragging the knob along the bar.
	Switches the system sound output OFF (mute) and ON.
	Allows you to adjust the LCD brightness level by dragging the knob along the bar.
	System enters “black-out” mode by turning off the LCD display, LED indicators, touchscreen, and sound. Press the power button (⏻) to wake up the system from “black-out” mode.

Quick Button Setup

By default, the five quick buttons on the OSD Control Panel have pre-assigned functions. You can re-define the buttons:

1. Click the Quick Button Setup button ( ) on the OSD control panel and the **Quick Button Setup** window appears.
2. At the bottom of the screen are the five quick buttons. Click the button you want to change.

3. Depending on the type of task to be associated with the button, click the Open button of the **Executed Program** or **Open Folder** type.
4. A dialog box appears. Select the desired program or folder and click **Open** or **Select**. After your selection, the entry field will display the program or folder information.



or

5. You can change the image appearing on the button by clicking the **Select Image** button. After selecting the image file, the original image on the button will be replaced.

6. Click **Set** to complete the changes.

NOTE: You can restore the quick buttons to the default settings by clicking **Reset All**.

Using G-Manager

G-Manager is a unified user interface utility that allows you to manage and configure the following:

- System
- Battery
- ECO (economic mode)
- Light Sensor
- Antenna
- Ignition
- Monitoring
- GPS Status

Starting G-Manager

You can start up G-Manager by any of the following methods:

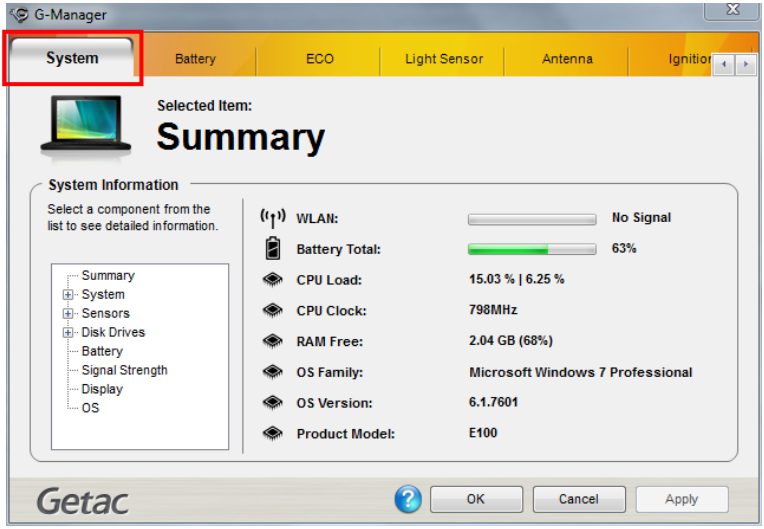
- Click **Start** → **All Programs** → **Getac Utility** → **G-Manager**, or
- Click and hold the icon located on the taskbar until a ring appears. From the small menu that pops up, click **G-Manager**.

The G-Manager window appears, containing 8 tabs as described later.

NOTE: Depending on your model, the actual items appearing on the screen may differ from those shown in this manual.

System Tab

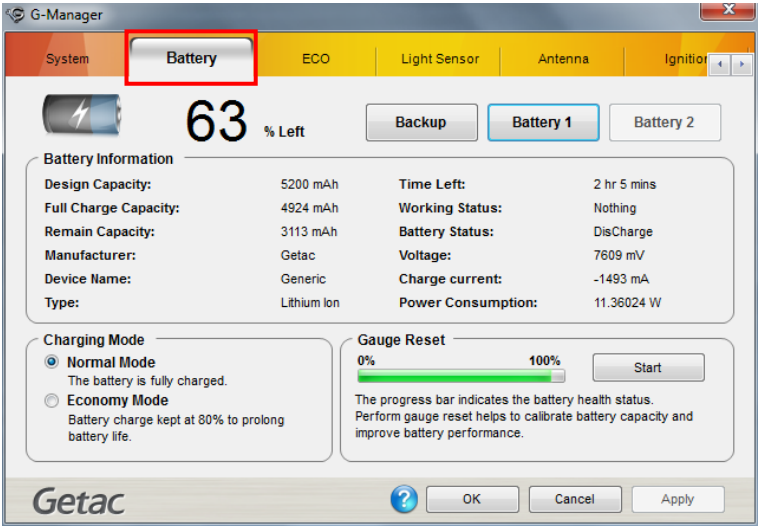
The **System** tab provides system information.



To view specific information, select the component from the list on the left side of the screen. The information of the selected component will be displayed on the right side of the screen.

Battery Tab

The **Battery** tab allows you to check the battery status and configure the battery.



The battery items shown in the screen depend on your computer model. You may see up to three battery items (**Backup**, **Battery 1**, and **Battery 2**). Click a battery item to view the information of the selected battery. Batteries not installed in your computer are grayed-out.

Battery Information

The upper portion of the screen displays the current status of the selected battery.

NOTE:

- If the AC adapter is connected, some information is not shown.
- When the percentage **% Left** is less than 10% then the value will be displayed in red.
- When an abnormal battery condition is detected, the battery information values will be displayed in red.

Charging Mode

The lower left portion of the screen allows you to select the charging mode.

- **Normal Mode** – The battery will be fully charged. When remaining charge reaches below 95%, then charging will start until it is fully charged.
- **Economy Mode** – This mode helps prolong battery life by charging up to 80% of its total capacity only. It is highly recommended if you are using AC power most of the time.

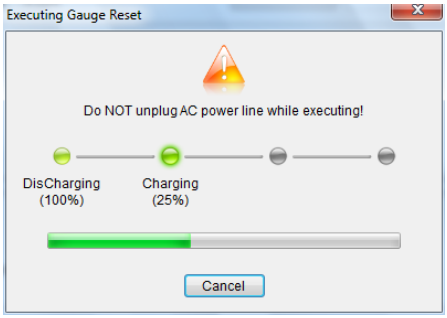
Gauge Reset

The lower right portion of the screen contains the battery health bar and provides the battery calibration function.

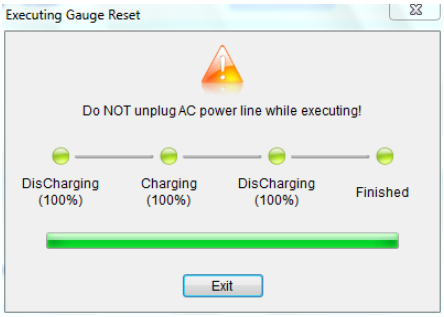
The health bar shows the batter's health by percentage. A low percentage indicates poor health and therefore the need to perform a gauge reset to calibrate the battery's capacity and improve the battery's performance. The gauge reset process includes discharging and then fully recharging the battery in two cycles. It can take several hours.

To perform a gauge reset:

1. Connect the AC adapter.
2. Click **Start**, located next to the health bar
3. In the pop-up dialog box, click **Yes** to start the process. The window as below appears displaying the progress bar.

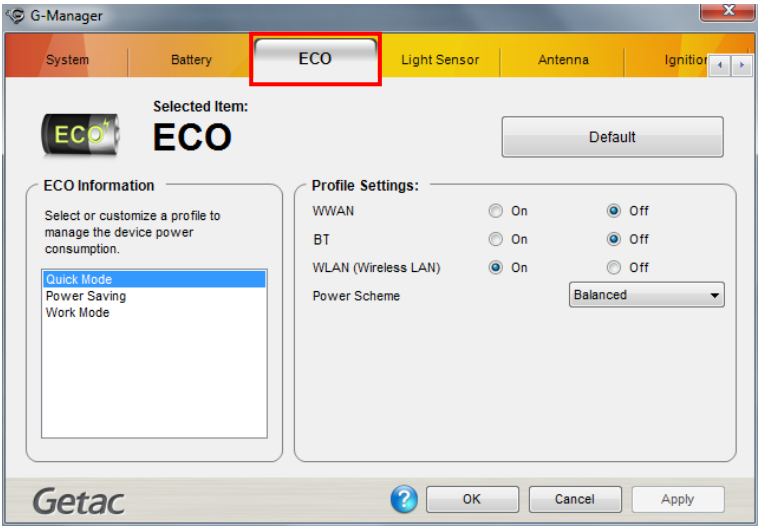


4. Wait till the process is completed. Click **Exit** when finished.



ECO Tab

The **ECO** tab allows you to configure ECO modes (or called power profiles).



To put the system into an ECO mode, use the **ECO** button (one of the buttons in the OSD Control Panel). (See "Using the OSD Control Panel" earlier in this chapter for information.)

ECO Information

The left portion of the screen lists the available power profiles (**Quick**, **Power Saving**, and **Work**). Each profile is a combination of power settings that results in different power consumptions. To change the settings of a profile, select (highlight) the profile name in the list.

Profile Settings

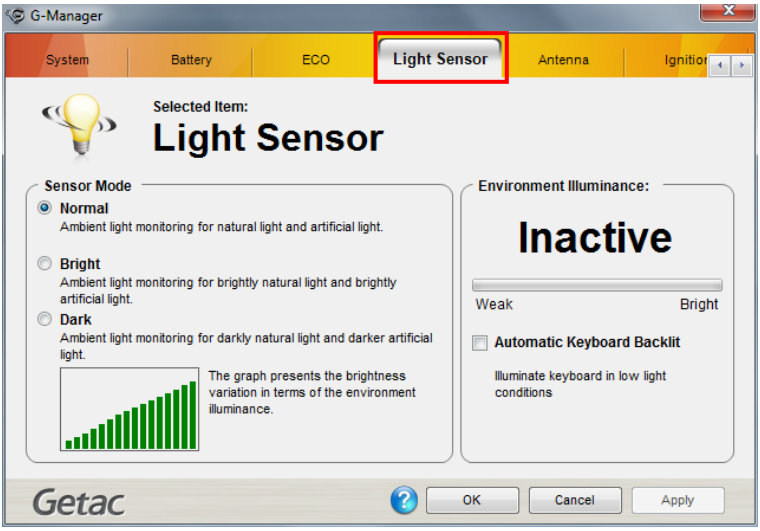
The right portion of the screen displays the settings of the current selected profile. You can set up the following items:

- **WWAN**, **BT**, and **WLAN** – can be on or off.
- **Power Scheme** – can be **Balanced**, **High Performance** or **Power Saver**. The settings here correspond to the settings in Windows. (See Windows Help for the description to each of the power scheme.)

After changing the settings, click **Apply** or **OK** to save the changes. To restore the settings to the default values, click **Default**.

Light Sensor Tab

The **Light Sensor** tab allows you configure how the light sensor works.



Sensor Mode

The left portion of the screen lists the sensor modes:

- **Normal** – Light sensor sensitivity is set at normal environment lighting condition.
- **Bright** – Light sensor sensitivity is set at bright environment lighting condition (e.g. outdoors).
- **Dark** – Light sensor sensitivity is set at dark environment lighting condition (e.g. indoors, storage warehouse, etc.).

Click to select a mode. Click **Apply** or **OK** to save the changes.

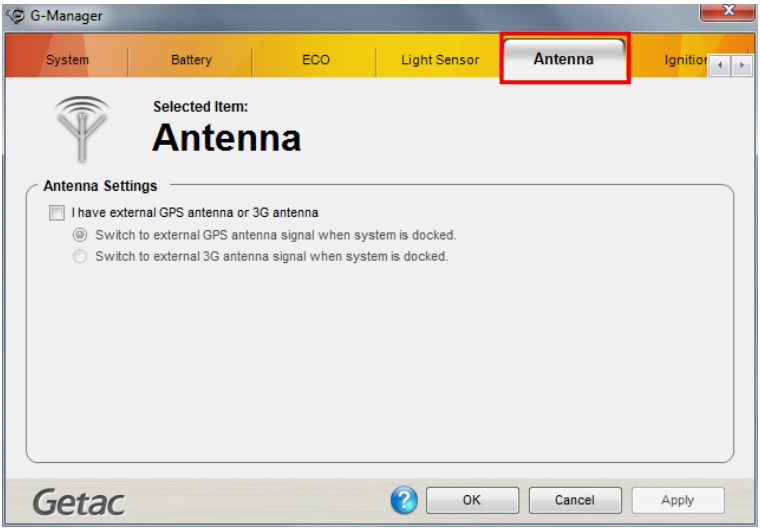
Environment Illuminance

NOTE: Not all models support this function.

To have the keypad backlight automatically turn on in poor lighting environment, click the checkbox **Automatic Keyboard Backlit**. Click **Apply** or **OK** to save the changes.

Antenna Tab

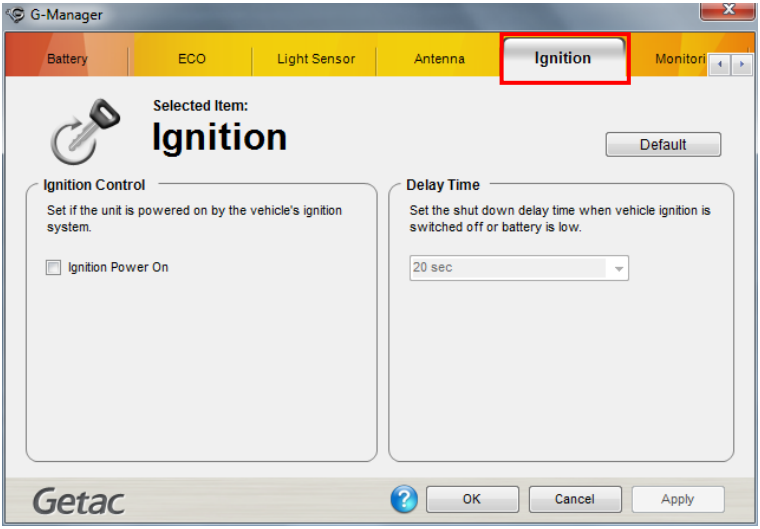
The **Antenna** tab allows you to set if your system will automatically use the external GPS or WWAN antenna when connected to the Docking Station.



Select the checkbox(es) accordingly. Click **Apply** or **OK** to save the changes.

Ignition Tab

The **Ignition** tab allows you to configure how your system works with the vehicle ignition.



Ignition Control

When your system is connected to the Vehicle Dock (available as an option), you can have your system derive power from the vehicle and have the on/off of the vehicle ignition turn on/off your system. To enable the feature, select the checkbox **Ignition Power On**. Click **Apply** or **OK** to save the changes.

Delay Time

When the **Ignition Power On** feature is enabled, the system will automatically shut down after the vehicle ignition is turned off or the battery is low. You can set the amount of time (20 seconds, 30 seconds, 45 seconds, 1 minute, or 2 minute) the system waits before shutting down. Click **Apply** or **OK** to save the changes.

Monitoring Tab

The **Monitoring** tab allows you to configure the monitoring function of G-Manager.

Items to Monitor

The left portion of the screen lists the items. Click the checkbox before an item to include it as a monitored component. Click **Apply** or **OK** to save the changes.

NOTE: Different models have different supported monitoring items; non-supported items cannot be selected (grayed out items).

Monitoring Options

The right portion of the screen allows you to set how the monitored items are displayed and how often the monitoring is updated.

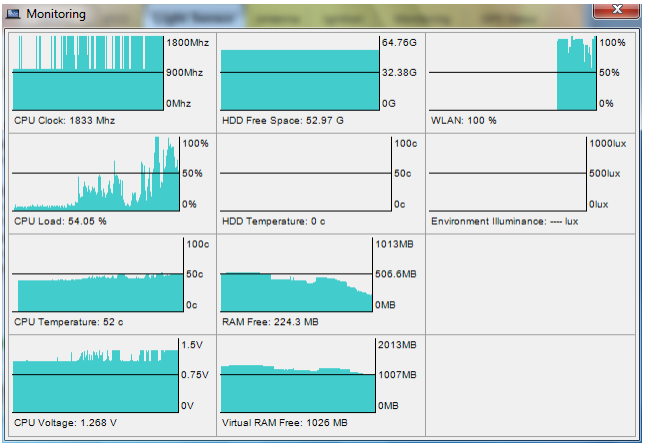
- **Always On Top** – allows the monitoring window to remain on top of your display.

- **Monitoring Interval** – sets the frequency of updates on the monitoring window (1/3/5/10/30 seconds or 1/5/30 minutes).

Click **Apply** or **OK** to save the changes.

Starting and Stopping the Monitoring

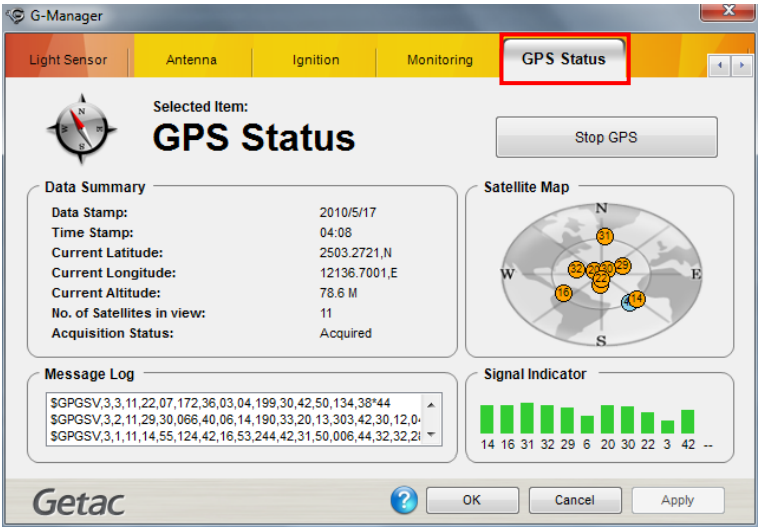
To start monitoring, click **START Monitor**. The monitoring window similar to the one below appears displaying requested information at specified intervals.



To stop monitoring, click the Close button at the upper right corner of the monitoring window or click **Stop Monitor** on the **Monitoring** tab page of G-Manager.

GPS Status Tab

The **GPS Status** tab shows the GPS status for models having the GPS module.



To start GPS positioning, click **Start GPS**. The screen displays:

- Ongoing raw data strings in the **Message Log** section
- Overhead satellite positions in the **Satellite Map** section
- Signal strength of the satellites in the **Signal Indicator** section

When GPS positioning is completed, the **Data Summary** section shows the GPS information of the current location.

To stop GPS positioning, click **Stop GPS**.

Using Getac Camera (Optional)

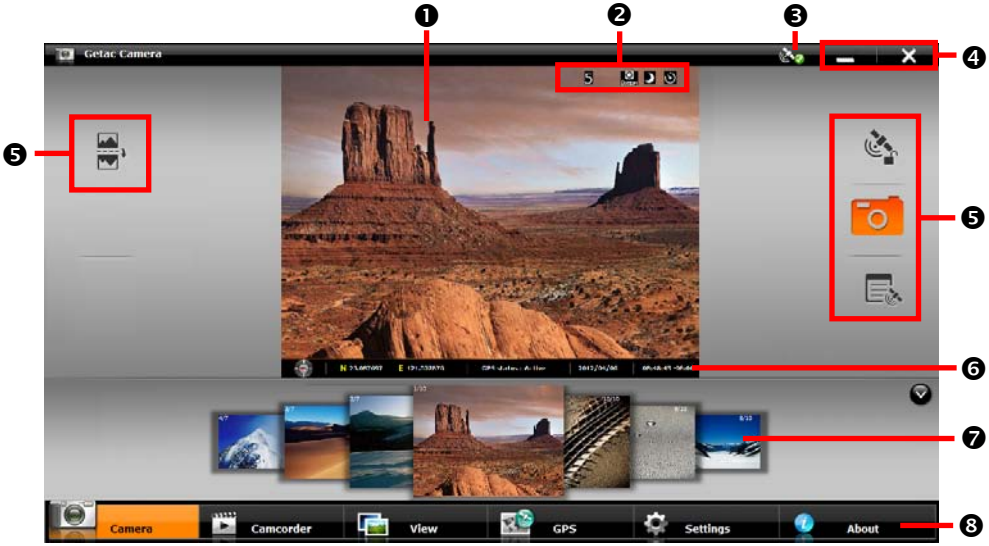
Getac Camera is a geo-tagging camera program, which allows you to stamp geographical information on photos as watermarks and embed such information into JPEG files as EXIF 2.2 metadata.

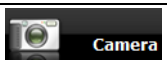
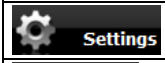
NOTE:

- Getac Camera works with Virtual-GPS (a separate application program). Make sure that Virtual-GPS is installed in your computer.
- Before starting Getac Camera, close any other program that uses the camera; otherwise, Getac Camera can only provide limited functions.

To start the program, double-click the **Getac Camera** program icon on Windows desktop. The Getac Camera window appears as shown below.

The GPS positioning will be automatically activated. When the GPS positioning is completed, you will see the geographical information in the watermark area on the image.



No.	Screen Elements	Descriptions	
❶	**Preview/Display Window**	Displays the live image in Camera mode and the selected image in View mode.	
❷	**Status Display**	Indicates the use of a feature.	
			GPS Lock in use
		/	Front/Bottom camera in use (depending on your model)
			Night mode in use
		/	Continuous/Timer mode in use
❸	**GPS Status**	Indicates if the GPS positioning is completed ( ) or not ( ).	
❹	**Window Control Buttons**		Minimizes the program window.
			Closes the program.
❺	**Control Buttons**	Perform immediate tasks on the current image.	
❻	**Watermark**	Displays the GPS information such as direction, longitude, latitude, GPS status, date, and time.	
❼	**Thumbnail Tray**	Displays up to 7 pictures in a thumbnail view. The middle is the picture last taken or selected. You can drag toward the right or left to scroll through the thumbnail view. The button hides/shows the Thumbnail Tray.	
❽	**Command Buttons**		Switches to Camera mode.
			Switches to Camcorder mode.
			Switches to View mode.
			Switches to GPS view.
			Switches to the Settings screen.
			Provides copyright, licensing, and help information.

Taking Pictures

1. Start the Getac Camera program. You will be in Camera mode.
2. You can use the buttons on the right and left side of the preview window for immediate controls. (See “Camera Control Buttons” for detailed information.)

   For overall settings, tap

. (See “Camera Settings” for detailed information.)
3. Aim the camera lens at your subject.

4. When ready, you can shoot the picture using either of the two methods:
   - **Method 1:** Tap the button.
   - **Method 2:** Drag the preview image and drop it into Thumbnail Tray.

5. The picture will appear in the middle of the Thumbnail Tray and be saved to the predefined storage location.

Camera Control Buttons

Control Buttons	Descriptions
	Flips the image vertically.
	Turns on/off GPS lock. The icon in the button shows the current status. GPS lock allows you record the exact location of the object you are shooting instead of where you are using the computer to shoot the picture. First, put the computer near your object and tap this button to lock the GPS information; then, you can go farther away to where you can have a good view of the object for the shooting. Remember to turn off GPS lock when the feature is not needed for the next picture. The GPS lock is always off whenever you start the program.
	Turns off/on watermark. The icon in the button shows the current status. You can turn off watermark if you do not want the watermark to show in the picture. Your setting remains effective until you change it again.

Shooting Videos

1. Start the Getac Camera program. You will be in Camera mode. Tap

to switch to Camcorder mode.

2. You can use the buttons on the right and left side of the preview window for immediate controls. (See “Camcorder Control Buttons” for detailed information.)

   For overall settings, tap

. (See “Camera Settings” for detailed information.)

3. Aim the camera lens at your subject.

   To start shooting the video, tap the button.

NOTE: The maximum time allowed for each recording session is 70 minutes. The recording process will stop automatically when it reaches the time limit.

4. To stop, tap the same button again.

5. An image from the video will appear in the middle of the Thumbnail Tray. The file is saved to the predefined storage location.

Camcorder Control Buttons

Control Buttons	Descriptions
	Increases the recording sound volume.
	Disables/enables the microphone.
	Decreases the recording sound volume.
	Turns on/off the display of elapsed recording time and current volume.

Using View Mode

Tap at the bottom of the screen to switch to View mode.

While in Camera or Camcorder mode, you can also switch to View mode by either of the two methods:

- **Method 1:** Double-tap the thumbnail in the Thumbnail Tray.
- **Method 2:** Drag the thumbnail and drop into the preview window.

Selecting an Image or Video

To scroll through the Thumbnail Tray, drag the tray toward the left or right.

To select an image or video, use either of the two methods:

- **Method 1:** Double-tap the thumbnail in the Thumbnail Tray.

- **Method 2:** Drag the thumbnail and drop into the display window.

Image Viewing Controls

When you select an image to view, you can perform the following tasks.

To	Via Control Buttons	Via Multi-touch Operations
Zoom in/out (up to four scales)	/	 Drag two fingers apart/ towards to zoom in/out.

To	Via Control Buttons	Via Multi-touch Operations
	When zoomed in, you can drag to view another portion of the image.	
Restore to the 100% scale		–
Rotate to the right/left by 90°	/	Drag two fingers in a clockwise/counterclockwise circular motion.
View image properties		–

Adding Notes to an Image

1. Switch to View mode, select the image, and tap .
2. In properties view, tap .
3. Type your notes in the entry field.
4. When completed, tap .

   The first three lines of the notes show on the screen.

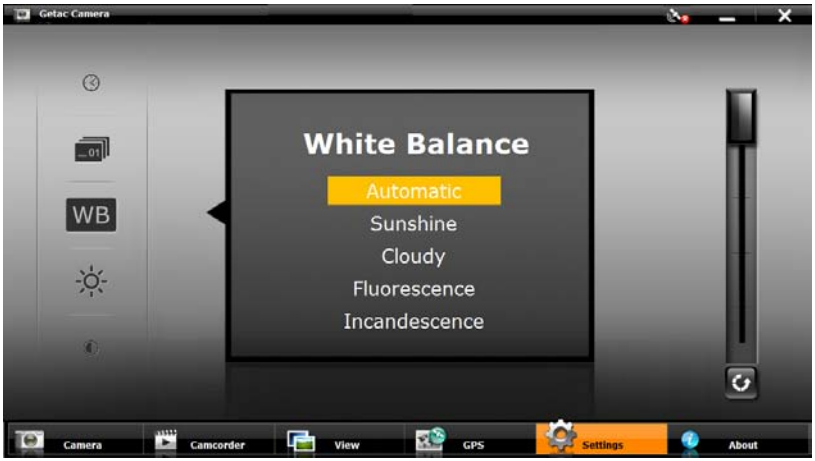
Video Playback Controls

When you select a video to playback, you can perform the following tasks.

To	Via Control Buttons
Start/pause the playback	/
Skip backwards/forwards	/
Increase/decrease volume	/
Turn on/off the status display	OFF / ON

Camera Settings

To change camera settings, tap Settings at the bottom of the screen. The Settings window appears showing the setting item previously accessed.



Along the left of the window are all the setting items. You can drag this area up or down to scroll through the items. The middle of the window displays the current item and setting value. To the right is the adjustment bar where you can tap or drag to change the setting value.

All changes (except for **Camera Mode**) remain effective until you change them again.

Items	Name	Descriptions
WB	**White Balance**	Five choices from which you can select one that matches the current light source: **Automatic** (default), **Sunshine**, **Cloudy**, **Fluorescence**, and **Incandescence**.
☼	**Brightness**	Adjusts the brightness level. The range of levels depends on computer models. You can tap ↻ to restore to the default level.

Items	Name	Descriptions	
	Contrast	Adjusts the contrast level. The range of levels depends on computer models. You can tap to restore to the default level.	
	Hue	Adjusts the hue level. The range of levels depends on computer models. You can tap to restore to the default level.	
	Flicker	Sets the frequency to match the local electrical system for flicker free shooting under electric light. Choices are: **60Hz** (default) and **50Hz**.	
	LED Light	Turns **On** (default) or **Off** the LED light. This item is available for setting only on models with the LED light.	
	Night Mode	Turns **On** or **Off** (default) night mode. You can turn on the feature for shooting in low light situations.	
	Image Size	Sets the image resolution to **2048x1536**, **1920x1080**, **1600x1200**, **1280x720**, or **640x480**.	
	Video Size	Sets the video size to **640x480** or **320x240**.	
	Camera Mode	Three choices for the shooting mode:	
		Normal	This is the default setting whenever the program is started.
		Continuous	Continuous shooting of 3 pictures (one shot per second).
		Timer	5-second countdown before shooting.
	Status Display	Turns **On** (default) or **Off** the display of the status indicators.	
	Watermark	Turns **On** (default) or **Off** the display of watermark in the image. (Turning off does not affect the embedded EXIF 2.2 metadata.)	

Items	Name	Descriptions	
	Shutter Sound	Turns **On** (default) or **Off** the sound played upon photo shooting.	
	Power Saving	Sets if power saving works for the program.	
		System (default)	The Camera program enters power saving mode according to the settings of Windows' Power Options.
		Never	The Camera program will not enter power saving mode while the program window is open. But when the program window is minimized, the **System** setting overrides.
	Camera Switch	Not supported by your model.	
	Folder Path	Sets the storage location of the images. To change to a different folder, tap **Browse** and select the folder. The default location is **User\[user name]\Pictures** folder that contains the original images. A subfolder named **Thumbs** contains a copy of the same images (with filename prefix **Thumb_**) for the thumbnail view. **NOTE:** If you are adding or deleting images using File Explorer, make sure to work on both the correct folder and its **Thumbs** subfolder.	
	Time Option	Displays the time throughout the program according to one of the two choices:	
		System time zone (default)	The time zone setting of the computer is taken into consideration. If the current location is in daylight saving time, the time will be adjusted accordingly.

Items	Name	Descriptions	
		UTC	The time is based on Coordinated Universal Time.
	Filename Prefix	The default filename prefix is **IMG**. The complete filename is IMG_*xxxxxx*.jpg (where *xxxxxx* = sequential number). When the sequential number has reached 999999 and you are taking the next picture, a message will pop up to ask you to change the prefix. You can change the prefix by typing the characters (limited to A~Z, a~z, 0~9, - and _) in the entry field. Maximum number of characters allowed is 10.	

Using Getac Smart Tag (Optional)

NOTE: The Getac Smart Tag program is available for models with the RFID module only.

Getac Smart Tag is a demo program that reads UID numbers from RFID tags. For enhanced applications and customization of the RFID reader/writer, contact your authorized Getac dealer.

Reading Tags

NOTE: The procedure below is based on the default settings of Getac Smart Tag.

1. Double-tap the **Getac Smart Tag** program icon on Windows desktop to start the program.

   The Getac Smart Tag floating button appears and is always on top of the screen. You can drag the button to a location you want.

2. By default, Getac Smart Tag scans three tag types, once for each type.

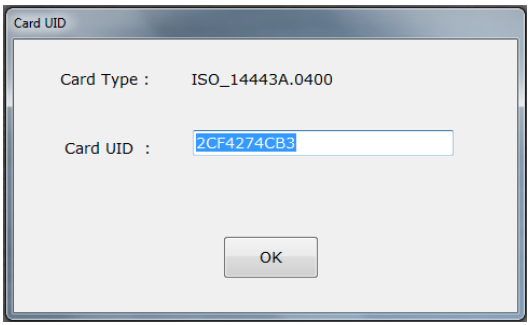
   To change settings, use the options menu. (See “Options Menu” later for information.)

3. Tap the floating button to start scanning. While scanning is in progress, the button’s color is orange.

Idle

Scanning

4. The result window as below appears. The **Card Type** field shows which type of tags are being scanned now. If a tag of the matching type is found, the **Card UID** field shows its UID; otherwise the field is blank.



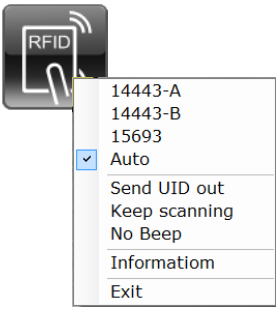
   Tap **OK** to close the window.

5. The program scans for 3 seconds for each tag type (14443-A, 14443-B, and 15693). The scanning stops after 9 seconds.

6. When you next start a scanning session, it begins with the last scanned card type in the previous session.

Options Menu

Tap and hold the floating button to open the options menu.



Menu Items	Descriptions
14443-A / 14443-B / 15693 / Auto	Check one of the three tag types for single type scanning. Check **Auto** to scan all three types.
Send UID out	Check this item for the UID data to be entered to where you have placed the insertion point (or called cursor) in a processing software. If unchecked (default setting), the result window appears to display the UID data.
Keep scanning	Check this item for the scanning to go on until you stop it by tapping the floating button. If unchecked (default setting), the scanning stops automatically after one cycle of scanning.
No Beep	Check this item so there is no beep sound upon each scanned UID. If unchecked (default setting), the system beeps to indicate a scanned UID.
Information	Provides extra information such as hardware port, firmware version, etc.
Exit	Closes the program.

All the changes remain effective until you change them again.

Chapter 7

Caring for the Tablet PC

Taking good care of your Tablet PC will ensure a trouble-free operation and reduce the risk of damage to your Tablet PC.

This chapter gives you guidelines covering areas such as protecting, storing, cleaning, and traveling.

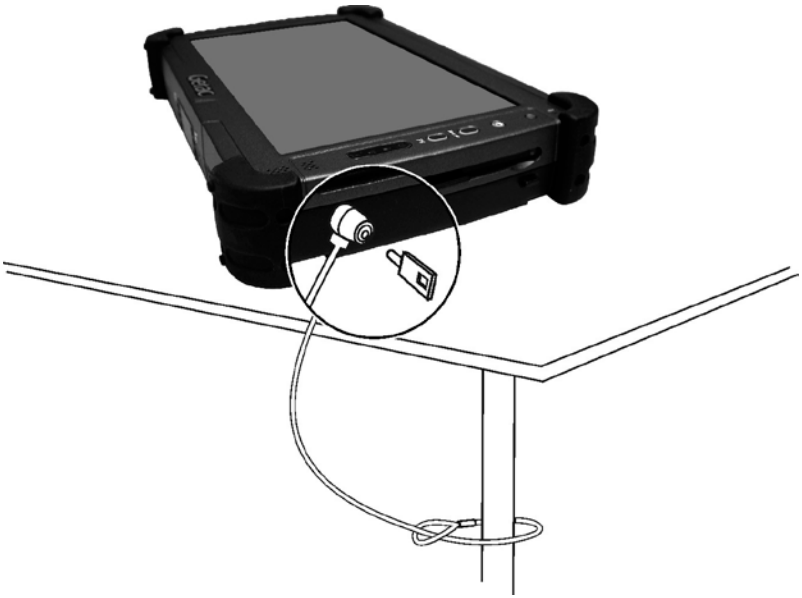
Protecting the Tablet PC

To safeguard the integrity of your Tablet PC data as well as the Tablet PC itself, you can protect the Tablet PC in several ways as described in this section.

Using the Cable Lock

You can use a Kensington-type cable lock to protect your Tablet PC against theft. The cable lock is available in computer stores.

To use the lock, loop the lock cable around a stationary object such as a table. Insert the lock to the Kensington lock hole and turn the key to secure the lock. Store the key in a safe place.



Using an Anti-Virus Strategy

You can install a virus-detecting program to monitor potential viruses that could damage your files.

Using Action Center (for Windows 7)

Action Center alerts you to take action on the following security essentials:

- Windows Firewall
- Windows Update
- Malware Protection (anti-virus, anti-spyware)
- Others (Internet security, user account control)

For detailed information, see Windows' online Help.

Taking Care of the Tablet PC

Location Guidelines

- For optimal performance, use the Tablet PC where the recommended temperature is between 0 °C (32 °F) and 55 °C (131 °F).
- Avoid placing the Tablet PC in a location subject to high humidity, extreme temperatures, mechanical vibration, direct sunlight, or heavy dust. Using in extreme environments for long periods can result in product deterioration and a shortened product life.
- Operating in an environment with metallic dust is not allowed.
- Place the Tablet PC on a flat and steady surface. Do not stand the Tablet PC on its side or store it in an upside-down position. A strong impact by dropping or hitting may damage the Tablet PC.
- Do not cover or block any ventilation openings on the Tablet PC. For example, do not place the Tablet PC on a bed, sofa, rug, or other similar surface. Otherwise, overheating may occur that results in damage to the Tablet PC.
- As the Tablet PC can become very hot during operation, keep it away from objects that are vulnerable to heat.
- Keep the Tablet PC at least 13 cm (5 inches) away from electrical appliances that can generate a strong magnetic field such as a TV, refrigerator, motor, or a large audio speaker.
- Avoid moving the Tablet PC abruptly from a cold to a warm place. A temperature difference of more than 10 °C (18 °F) may cause condensation inside the unit, which may damage the storage media.

General Guidelines

- Do not place heavy objects on top of the Tablet PC as this may damage the display.
- The screen surface is easily scratched. Avoid touching it with a sharp object such as a pen or pencil.
- LCD image sticking occurs when a fixed pattern is displayed on the screen for a prolonged period of time. You can avoid the problem by limiting the amount of static content on the display. It is recommended that you use a screen saver or turn off the display when it is not in use.
- To maximize the life of the backlight in the display, allow the backlight to automatically turn off as a result of power management.

Cleaning Guidelines

- Never clean the Tablet PC with its power on.
- Use a soft cloth moistened with water or a non-alkaline detergent to wipe the exterior of the Tablet PC.
- Gently wipe the display with a soft, lint-free cloth. Do not use alcohol or detergent on the display.
- If water or liquid is split onto the Tablet PC, wipe it dry and clean when possible. Though your Tablet PC is water-proof, do not leave the Tablet PC wet when you can dry it.
- If the Tablet PC gets wet where the temperature is 0°C (32°F) or below, freeze damage may occur. Make sure to dry the wet Tablet PC.

Battery Pack Guidelines

- Recharge the battery pack when it is nearly discharged. When recharging, make sure that the battery pack is fully charged. Doing so may avoid harm to the battery pack.

- The battery pack is a consumable product and the following conditions will shorten its life:
  – when frequently charging the battery pack
  – when using, charging, or storing the battery in high temperature condition

- To avoid hastening the deterioration of the battery pack thereby prolonging its useful life, minimize the number of times you charge it so as not to frequently increase its internal temperature.

- Charge the battery pack between 10 °C ~ 30 °C (50 °F ~ 86 °F) temperature range.
  A higher environment temperature will cause the battery pack's temperature to rise. Avoid charging the battery pack inside a closed vehicle and in hot weather condition.
  Also, charging will not start if the battery pack is not within the allowed temperature range.

- It is recommended that you do not charge the battery pack more than once a day.

- It is recommended that you charge the battery pack with the Tablet PC's power off.

- To maintain the battery pack's operating efficiency, store it in a cool dark place removed from the Tablet PC and with 30 % ~ 40 % charge remaining.

- Important guidelines when using the battery pack.

  When installing or removing the battery pack take note of the following:
  – avoid installing or removing the battery pack when the Tablet PC is in Sleep mode. Abruptly removing the battery pack may cause loss of data or the Tablet PC may become unstable.
  – avoid touching the battery pack terminals or damage may occur, thereby causing improper operation to it or the Tablet PC.

  The Tablet PC's input voltage and surrounding temperature will directly affect the battery pack's charge and discharge time:
  – charging time will be prolonged when the Tablet PC is turned on. To shorten the charging time, it is recommended that you place the

Tablet PC in Sleep or hibernation mode.
  – a low temperature will prolong the charging time as well as hasten the discharge time.

- When using battery power in an extremely low temperature environment, you may experience shortened operating time and incorrect battery level reading. This phenomenon comes from the chemical characteristics of batteries. The appropriate operating temperature for the battery is -10 °C ~ 50 °C (14 °F ~ 122 °F).

Touchscreen Guidelines

- Use the finger or the included stylus on the display. Using a sharp or metallic object other than your finger or stylus may cause scratches and damage the display, thereby causing errors.
- Use a soft cloth to remove dirt on the display. The touchscreen surface has a special protective coating that prevents dirt from sticking to it. Not using a soft cloth may cause damage to the special protective coating on the touchscreen surface..
- Turn off the Tablet PC power when cleaning the display. Cleaning the display with the power on may cause improper operation.
- Do not use excessive force on the display. Avoid placing objects on top of the display as this may cause the glass to break thereby damaging the display.
- Using the touchscreen during low temperature (less than 5 °C) may cause a slower response time, this is normal. A normal response time may be restored upon returning to room temperature.
- When there is a noticeable discrepancy in the placement of the stylus on the screen and the indicated position of the onscreen pointer, use the calibration utility to recalibrate the touchscreen display. (A shortcut of the utility is provided in the OSD Control Panel. See “Using the OSD Control Panel” in Chapter 6.)

When Traveling

- Before traveling with your Tablet PC, make a backup of your hard disk data into flash disks or other storage devices. As an added precaution, bring along an extra copy of your important data.
- Make sure that the battery pack is fully charged.
- Make sure that the Tablet PC is turned off.
- Disconnect the AC adapter from the Tablet PC and take it with you. Use the AC adapter as the power source and as a battery-charger.
- Hand-carry the Tablet PC. Do not check it in as luggage.
- If you need to leave the Tablet PC in the car, put it in the trunk of the car to avoid exposing the Tablet PC to excessive heat.
- When going through airport security, it is recommended that you send the Tablet PC and flash disks through the X-ray machine (the device you set your bags on). Avoid the magnetic detector (the device you walk through) or the magnetic wand (the handheld device used by security personnel).
- If you plan to travel abroad with your Tablet PC, consult your dealer for the appropriate AC power cord for use in your country of destination.

Chapter 8

Troubleshooting

Tablet PC problems can be caused by hardware, software, or both. When you encounter any problem, it might be a typical problem that can easily be solved.

This chapter tells you what actions to take when solving common Tablet PC problems.

Preliminary Checklist

Here are helpful hints to follow before you take further actions when you encounter any problem:

- Try to isolate which part of the Tablet PC is causing the problem.
- Make sure that you turn on all peripheral devices before turning on the Tablet PC.
- If an external device has a problem, make sure that the cable connections are correct and secure.
- Make sure that the configuration information is properly set in the BIOS Setup program.
- Make sure that all the device drivers are correctly installed.
- Make notes of your observations. Are there any messages on the screen? Do any indicators light? Do you hear any beeps? Detailed descriptions are useful to the service personnel when you need to consult one for assistance.

If any problem persists after you follow the instructions in this chapter, contact an authorized dealer for help.

Solving Common Problems

Battery Problems

The battery does not charge (Battery Charge indicator does not light amber).

- Make sure that the AC adapter is properly connected.
- Make sure that the battery is not too hot or cold. Allow time for the battery pack to return to room temperature.
- If the battery doesn't charge after it has been stored in very low temperatures, try disconnecting and reconnecting the AC adapter to solve the problem.
- Make sure that the battery pack is installed correctly.
- Make sure that the battery terminals are clean.

The operating time of a fully charged battery becomes shorter.

- If you often partially recharge and discharge, the battery might not be charged to its full potential. Initialize the battery to solve the problem. (Use the battery calibration tool as described in "Gauge Reset" in Chapter 6.)

The battery operating time indicated by the battery meter does not match the actual operating time.

- The actual operating time can be different from the estimated time, depending on how you are using the Tablet PC. If the actual operating time is much less than the estimated time, initialize the battery. (Use the battery calibration tool as described in "Gauge Reset" in Chapter 6.)

BT Wireless Transmission Problems

I cannot connect to another device with BT wireless technology.

- Make sure that both devices have activated BT feature.

- Make sure that the distance between the two devices is within the limit and that there are no walls or other obstructions between the devices.
- Make sure that the other device is not in "Hidden" mode.
- Make sure that both devices are compatible.

Display Problems

Nothing appears on the screen.

- During operation, the screen may automatically turn off as a result of power management. Press any key to see if the screen comes back.
- The brightness level might be too low. Increase the brightness.

The characters on the screen are dim.

- Adjust the brightness and/or contrast.

Bad dots appear on the display at all times.

- A small number of missing, discolored, or bright dots on the screen are an intrinsic characteristic of TFT LCD technology. It is not regarded as a LCD defect.

Hardware Device Problems

The Tablet PC does not recognize a newly installed device.

- The device may not be correctly configured in the BIOS Setup program. Run the BIOS Setup program to identify the new type.
- Make sure if any device driver needs to be installed. (Refer to the documentation that came with the device.)
- Make sure if the device needs any jumper or switch settings. (Refer to the documentation that came with the device.)
- Check the cables or power cords for correct connections.

- For an external device that has its own power switch, make sure that the power is turned on.

Hard Disk Drive Problems

The hard disk drive error message appears on the screen.

- The hard disk drive has defects. Ask your dealer for help.

The hard disk drive operations seem slow.

- The data files stored on the hard disk drive may be fragmented. Use a tool such as Window's **Disk Defragmenter** to defragment the files.

The hard disk drive / heater indicator blinks red.

- The optional hard disk drive heater is in an abnormal state. Ask for repair service in case this happens.

LAN Problems

I cannot access the network.

- Make sure that the LAN cable is properly connected to the RJ-45 connector and the network hub.
- Make sure that the network configuration is appropriate.
- Make sure that the user name or password is correct.

PC Card Problems

The PC card does not work.

- Make sure that the PC card is correctly seated.
- If the card requires an IRQ (Interrupt ReQuest), make sure that there is one available.

The PC card stops communicating properly.

- The application may have been reset when the Tablet PC is turned off or in Sleep mode. Exit and restart the application.

Power Management Problems

The Tablet PC does not enter Sleep or Hibernation mode automatically.

- If you have a connection to another computer, the Tablet PC does not enter Sleep or Hibernation mode if the connection is actively in use.
- Make sure that the Sleep or Hibernation time-out is enabled.

The Tablet PC does not enter Sleep or Hibernation mode immediately.

- If the Tablet PC is performing an operation, it normally waits for the operation to finish.

The Tablet PC does not resume from Sleep or Hibernation mode.

- The Tablet PC automatically enters Sleep or Hibernation mode when the battery pack is empty. Do any one of the following:
  - Connect the AC adapter to the Tablet PC.
  - Replace the empty battery pack with a fully charged one.

Software Problems

An application program does not work correctly.

- Make sure that the software is correctly installed.
- If an error message appears on the screen, consult the software program's documentation for further information.
- If you are sure the operation has stop, reset the Tablet PC. (See "Resetting the Tablet PC" later in this chapter.)

Sound Problems

No sound is produced.

- Make sure that the volume control is not set too low. Increase the volume.
- Make sure that the sound is not muted.
- Make sure that the Tablet PC is not in Sleep mode.
- If using an external speaker, make sure that the speaker is properly connected.

Distorted sound is produced.

- Make sure that the volume control is not set too high or too low. In most cases, a high setting can cause the audio electronics to distort the sound.

The external audio device does not work.

- Make sure that your Tablet PC is equipped with the driver needed.
- Click the speaker symbol on the taskbar and check the Windows volume control.
- Check the volume control of your Tablet PC.

Startup Problems

When you turn on the Tablet PC, it does not respond and the Power Indicator does not light green.

- If you are using an external AC power, make sure that the AC adapter is correctly and securely connected. If so, make sure that the electrical outlet works properly.
- If you are using the battery power, make sure that the battery is not discharged.

When you turn on the Tablet PC, it stops after POST.

- Reset your Tablet PC. (See "Resetting the Tablet PC" later in this chapter.)

Wireless LAN Problems

I cannot use the wireless LAN feature.

- Make sure that the wireless LAN feature is turned on.

Transmission quality is poor.

- Your Tablet PC may be in an out-of-range situation. Move your Tablet PC closer to the Access Point or another wireless LAN device it is associated with.
- Check if there is high interference around the environment and solve the problem as described next.

Radio interference exists.

- Move your Tablet PC away from the device causing the radio interference such as microwave oven and large metal objects.
- Plug your Tablet PC into an outlet on a different branch circuit from that used by the affecting device.
- Consult your dealer or an experienced radio technician for help.

I cannot connect to another wireless LAN device.

- Make sure that the wireless LAN feature is turned on.
- Make sure that the SSID setting is the same for every wireless LAN device in the network.
- Your Tablet PC is not recognizing changes. Restart the Tablet PC.
- Make sure that the IP address or subnet mask setting is correct.

I cannot communicate with the computer in the network when Infrastructure mode is configured.

- Make sure that the Access Point your Tablet PC is associated with is powered on and all the LEDs are working properly.
- If the operating radio channel is in poor quality, change the Access Point and all the wireless station(s) within the BSSID to another radio channel.
- Your Tablet PC may be in an out-of-range situation. Move your Tablet PC closer to the Access Point it is associated with.
- Make sure that your Tablet PC is configured with the same security option (encryption) to the Access Point.
- Use the Web Manager/Telnet of the Access Point to check whether it is connected to the network.
- Reconfigure and reset the Access Point.

I cannot access the network.

- Make sure that the network configuration is appropriate.
- Make sure that the user name or password is correct.
- You have moved out of range of the network.
- Turn off power management.

Other Problems

The date/time is incorrect.

- Correct the date and time via the operating system or BIOS Setup program.
- After you have performed everything as described above and still have the incorrect date and time every time you turn on the Tablet PC, the RTC (Real-Time Clock) battery is at the end of its life. Call an authorized dealer to replace the RTC battery.

Resetting the Tablet PC

You may have to reset (reboot) your Tablet PC on some occasions when an error occurs and the program you are using hangs up.

If the Tablet PC operation seems to hang up, first wait. It is possible that the Tablet PC is processing data. Periodically check the hard disk drive in-use indicator, if it flashes irregularly, the program may be accessing data and preventing you from using the keypad. If you are sure the operation has stopped and you cannot use the "restart" function of the operating system, reset the Tablet PC.

Reset the Tablet PC by any one of these methods:

- Press and hold the **P1** button for more than 2 seconds. This opens the **Ctrl-Alt-Del** screen where you can select actions including **Restart**.
- If the above action does not work, press and hold the power button for more than 5 seconds to force the system to turn off. Then turn on the power again.

CAUTION: Resetting will cause any unsaved data to be lost.

Appendix A

Specifications

NOTE: Specifications are subject to change without any prior notice.

Parts		Specifications
CPU		Intel® Cedar Trail N2800 1.86 GHz
Chipset		Intel® NM10
BIOS		Phoenix, 4MB Flash EEPROM
RAM		2GB/4GB DDR3-1066 SO-DIMM
Video	Controller	Intel® GMA 3650
	Display Panel	10.1-inch HD 1366x768 LCD, sunlight readable, 600 Nits maximum brightness, resistive multi-touch screen, non-glare type with AR/AG film, light sensor for auto backlight adjustment
Audio	Features	High Definition audio, volume control via software
	Speaker	Integrated speaker
	Microphone	Integrated microphone
	Port	combo audio (headphone-out + microphone-in)
Hard disk drive		mSATA, 64/80GB
I/O ports (standard)		USB (2.0) × 2, RJ-45, combo audio (4-pole TRRS 3.5mm type), RS232, PCMCIA, Smart Card, Docking
LAN		10/100/1000 Mbps Ethernet
Wireless LAN (option)		802.11 a/b/g/n
BT (option)		BT 4.0+EDR (Class 1)

Parts		Specifications
GPS (option)		Internal UART
WWAN (option)		Gobi ™ 3000 3G Mobile Broadband
Camera (option)		CMOS, 3M pixel
Security		Kensington lock TPM 1.2
Power	AC adapter	Universal 65 W; input: 100~240 V, 50/60 Hz; output: 19V
	Battery	Lithium-ion cylindrical battery, 4 cells, 5200mAh Hot Swap technology with backup battery (2 cells)
Dimension (LxW×D)		280×184×40mm (11×7.2×1.59 inch)
Weight		1.6 kg (3.52 lb)
Environ-ment	Temperature	Operating: –20 °C (–4 °F) to 60 °C (140 °F) Storage: –40 °C (–40 °F) to 71 °C (160 °F)
	Humidity	Relative: 0 % to 95 % non-condensing
	Compliance	MIL-STD-810G and IP65
Regulations		CE, FCC, UL

Additional Button Definitions

Instead of starting up a program, the **Menu** and **P1** buttons provide keyboard key functions for specific occasions as described below.

Button	Occasion	Action	Function
Menu	POST and non-ACPI	Short or long press	**Enter** key
	BIOS Setup	Short press (< 2 sec)	**Esc** key
		Long press (> 2 sec)	**Enter** key
	ACPI	Short press (< 2 sec)	**Tab** key (ASCII = 08)
		Long press (> 2 sec)	**Enter** key
P1	POST and non-ACPI	Short press (< 2 sec)	**Down** key
		Long press (> 2 sec)	**Up** key
	BIOS Setup	Short press (< 2 sec)	**Down** key
		Long press (> 2 sec)	**Up** key
	ACPI	Short press (< 2 sec)	**Down** key
		Long press (> 2 sec)	**Ctrl+Alt+Del** key combination

Appendix B

Regulatory Information

This appendix provides regulatory statements and safety notices on your Tablet PC.

NOTE: Marking labels located on the exterior of your Tablet PC indicate the regulations that your model complies with. Please check the marking labels and refer to the corresponding statements in this appendix. Some notices apply to specific models only.

On the Use of the System

Class B Regulations

USA

Federal Communications Commission Radio Frequency Interference Statement

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Please note:

The use of a non-shielded interface cable with this equipment is prohibited.

Canada

Canadian Department of Communications
Radio Interference Regulations Class B Compliance Notice

This Class B digital apparatus meets all requirements of the Canada Interference-Causing equipment regulations.

Cet appareil numérique de Classe B respecte toutes les exigences du Règlement Canadien sur le matériel brouileur.

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe B prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

Safety Notices

About the Battery

Caution Texts Concerning Lithium Batteries

DANISH
ADVARSEL! Lithiumbatteri – Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tilbage til leverandøren.

NORWEGIAN
ADVARSEL: Eksplosjonsfare ved feilaktig skifte av batteri. Benytt samme batteritype eller en tilsvarende type anbefalt av apparatfabrikanten. Brukte batterier kasseres i henhold til fabrikantens instruksjoner.

SWEDISH
VARNING: Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren. Kassera använt batteri enligt fabrikantens instruktion.

FINNISH
VAROITUS: Paristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan valmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

ENGLISH
CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the equipment manufacturer. Discard used batteries according to manufacturer's instructions.

DEUTSCH
VORSICHT: Explosionsgefahr bei unsachgemäßem Austausch der Batterie. Ersatz nur durch denselben oder einen vom Hersteller empfohlenen gleich-wertigen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.

FRENCH
ATTENTION: II y a danger d'explosion s'il y a remplacement incorrect de la batterie. Remplacer uniquement avec une batterie du même type ou d'un type équivalent recommandé par le constructeur. Mettre au rebut les batteries usagées conformément aux instructions du fabricant.

Attention (for USA Users)

The product that you have purchased contains a rechargeable battery. The battery is recyclable. At the end of its useful life, under various state and local laws, it may be illegal to dispose of this battery into the municipal waste stream. Check with your local solid waste officials for details in your area for recycling options or proper disposal.

About the AC Adapter

- Use only the AC adapter supplied with your Tablet PC. Use of another type of AC adapter will result in malfunction and/or danger.
- Do not use the adapter in a high moisture environment. Never touch the adapter when your hands or feet are wet.
- Allow adequate ventilation around the adapter when using it to operate the device or charge the battery. Do not cover the AC adapter with

paper or other objects that will reduce cooling. Do not use the AC adapter while it is inside a carrying case.

- Connect the adapter to a proper power source. The voltage requirements are found on the product case and/or packaging.
- Do not use the adapter if the cord becomes damaged.
- Do not attempt to service the unit. There are no serviceable parts inside. Replace the unit if it is damaged or exposed to excess moisture.

On the Use of the RF Device

NOTE: The information in this section applies to models with the wireless LAN module.

USA and Canada Safety Requirements and Notices

IMPORTANT NOTE: To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Radio Frequency Interference Requirements and SAR

The FCC with its action in ET Docket 93-62 has adopted a safety standard for human exposure to Radio Frequency (RF) electromagnetic energy emitted by FCC certified equipment. The wireless LAN module meets the Human Exposure limits found in OET Bulletin 65, 2001, and ANSI/IEEE C95.1, 1992. Proper operation of this radio according to the instructions found in this manual will result in exposure substantially below the FCC's recommended limits. The following safety precautions should be observed:

- Do not touch or move antenna while the unit is transmitting or receiving.
- Do not hold any component containing the radio such that the antenna is very close or touching any exposed parts of the body, especially the face or eyes, while transmitting.
- Do not operate the radio or attempt to transmit data unless the antenna is connected; if not, the radio may be damaged.

Use in specific environments:

- The use of wireless devices in hazardous locations is limited by the constraints posed by the safety directors of such environments.

- The use of wireless devices on airplanes is governed by the Federal Aviation Administration (FAA).
- The use of wireless devices in hospitals is restricted to the limits set forth by each hospital.

Antenna use:

- In order to comply with FCC RF exposure limits, low gain integrated antennas should be located at a minimum distance of 20 cm (8 inches) or more from the body of all persons.
- High-gain, wall-mount, or mast-mount antennas are designed to be professionally installed and should be located at a minimum distance of 30 cm (12 inches) or more from the body of all persons. Please contact your professional installer, VAR, or antenna manufacturer for proper installation requirements.

Explosive Device Proximity Warning

WARNING: Do not operate a portable transmitter (such as a wireless network device) near unshielded blasting caps or in an explosive environment unless the device has been modified to be qualified for such use.

Antenna Warning

WARNING: To comply with the FCC and ANSI C95.1 RF exposure limits, it is recommended that the antenna for this device be installed so as to provide a separation distance of at least 20 cm (8 inches) from all persons and that the antenna must not be co-located or operating in conjunction with any other antenna or radio transmitter. It is recommended that the user limit exposure time if the antenna is positioned closer than 20 cm (8 inches).

Use on Aircraft Caution

CAUTION: Regulations of the FCC and FAA prohibit airborne operation of radio-frequency wireless devices because their signals could interfere with critical aircraft instruments.

EMC Requirements

This device uses, generates and radiates radio frequency energy. The radio frequency energy produced by this device is well below the maximum exposure allowed by the Federal Communications Commission (FCC).

This device complies with the limits for a Class B digital device pursuant to Part 15 subpart C of the FCC Rules and Regulations. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference.
(2) This device must accept any interference received, including interference that may cause undesired operation.

The FCC limits are designed to provide reasonable protection against harmful interference when the equipment is installed and used in accordance with the instruction manual and operated in a commercial environment. However, there is no guarantee that interference will not occur in a particular commercial installation, or if operated in a residential area.

If harmful interference with radio or television reception occurs when the device is turned on, the user must correct the situation at the user's own expense. The user is encouraged to try one or more of the following corrective measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION: The Part 15 radio device operates on a non-interference basis with other devices operating at this frequency. Any changes or modification to said product not expressly approved by the manufacturer could void the user's authority to operate this device.

Canada Radio Frequency Interference Requirements

To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.

Pour empêcher que cet appareil cause du brouillage au service faisant l'objet d'une licence, il doit être utilisé à l'intérieur et devrait être placé loin des fenêtres afin de fournir un écran de blindage maximal. Si le matériel (ou son antenne d'émission) est installé à l'extérieur, il doit faire l'objet d'une licence.

European Union CE Marking and Compliance Notices

Statements of Compliance

English
This product follows the provisions of the European Directive 1999/5/EC.

Danish
Dette produkt er i overensstemmelse med det europæiske direktiv 1999/5/EC.

Dutch
Dit product is in navolging van de bepalingen van Europees Directief 1999/5/EC.

Finnish
Tämä tuote noudattaa EU-direktiivin 1999/5/EC määräyksiä.

French
Ce produit est conforme aux exigences de la Directive Européenne 1999/5/EC.

German
Dieses Produkt entspricht den Bestimmungen der Europäischen Richtlinie 1999/5/EC.

Greek
Το προϊόν αυτό πληροί τις προβλέψεις της Ευρωπαϊκής Οδηγίας 1999/5/EC.

Icelandic
Þessi vara stenst reglugerð Evrópska Efnahags Bandalagsins númer 1999/5/EC.

Italian
Questo prodotto è conforme alla Direttiva Europea 1999/5/EC.

Norwegian
Dette produktet er i henhold til bestemmelsene i det europeiske direktivet 1999/5/EC.

Portuguese
Este produto cumpre com as normas da Diretiva Européia 1999/5/EC.

Spanish
Este producto cumple con las normas del Directivo Europeo 1999/5/EC.

Swedish
Denna produkt har tillverkats i enlighet med EG-direktiv 1999/5/EC.

Local Restrictions of 802.11a/b/g/n Radio Usage

CAUTION: Due to the fact that the frequencies used by 802.11a/b/g/n wireless LAN devices may not yet be harmonized in all countries, 802.11a/b/g/n products are designed for use only in specific countries or regions, and is not allowed to be operated in countries or regions other than those of designated use. As a user of these products, you are responsible for ensuring that the products are used only in the countries or regions for which they were intended and for verifying that they are configured with the correct selection of frequency and channel for the country or region of use. Any deviation from permissible settings and restrictions in the country or region of use could be an infringement of local law and may be punished as such.

The European variant is intended for use throughout the European Economic Area. However, authorization for use is further restricted in particular countries or regions within countries, as follows:

General

European standards dictate maximum radiated transmit power of 100 mW Effective Isotropic Radiated Power (EIRP) and the frequency range 2400 – 2483.5 MHz.

Belgium and the Netherlands

In Belgium and the Netherlands, the product may not be used outdoors.

France

Departments in Which the Wireless LAN Module Can Be Used (Indoors Only)

The wireless LAN module can currently be used indoors only in the following 38 departments of mainland France. Please turn off your wireless LAN radio when operating the device in areas/places other than the 38 departments listed:

01	Ain Orientales	36	Indre	66	Pyrénées
02	Aisne	37	Indre et Loire	67	Bas Rhin
03	Allier	41	Loir et Cher	68	Haut Rhin
05	Hautes Alpes	42	Loire	70	Haute Saône
08	Ardennes	45	Loiret	71	Saône et Loire
09	Ariège	50	Manche	75	Paris
11	Aude	55	Meuse	82	Tarn et Garonne
12	Aveyron	58	Nièvre	84	Vaucluse
16	Charente	59	Nord	88	Vosges
24	Dordogne	60	Oise	89	Yonne
25	Doubs	61	Orne	90	Territoire de Belfort
26	Drôme	63	Puy du Dôme	94	Val de Marne
32	Gers	64	Pyrénées Atlantique		

Departments in Which the Wireless LAN Module's Maximum EIRP Not Shown in the Previous Table

Frequency Ranges (MHz)	Indoors	Outdoors
2400 – 2446.5	10 mW	Not permitted
2446.5 – 2483.5	100 mW	100 mW on private property with Ministry of Defense approval

Turning Off the Wireless LAN Radio

NOTE: Turning the wireless LAN radio off is not the same as disabling the wireless LAN card. It is not necessary to disable the card to meet the regulatory requirements.

While operating the Tablet PC in those French departments that do not allow use of the wireless LAN equipment, the user of the equipment must turn off the wireless LAN radio in order to comply with local regulations.